JULY/AUGUST 1986 $2.50

CURRENT NOTES

The Newsletter For ATARI Owners

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THE WASHINGTON AREA ATARI COMPUTER ENTHUSIASTS

CURRENT NOTES

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<u>The EDITOR of Current Notes</u> is Joe Waters, 122 N. Johnson Rd., Sterling, VA 22170 (703) 450-4761. Submissions of articles or advertising copy, subscription requests or back-issue orders should be sent to the editor. Deadline date for articles and is the 12th day of the preceeding month.

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EDITORIAL

by Joe Waters

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Astute readers will notice several changes in this issue of Current Notes. This is one of the two issues per year that serves to cover TWO months, July and August. I have indicated this on the cover and on each page to help remind you that there will be no issue next month. Current Notes will emerge again in September.

As it turns out, it has taken me a very long time to get all the articles edited and ready for this issue. The reason? I have been blessed with a LOT of material for Atari fans! When everything was edited and printed out in rough draft, I found that I had more than 60 pages of articles -- not counting advertisements and club news. Our newsletter is normally 48 total pages. Something had to be done. The first thing I did was switch back to the compressed EPSON mode of 16.5 characters per inch rather than last month's elite font at 13 cpi. That change alone netted an additional 25% coverage. Then I carefully estimated printing costs. If I add another sheet of paper (4 more pages), my costs go up well over two hundred dollars. My subscription revenue does not change; my sales revenue does not change; my advertising revenue does not change.

But what the heck -- this is the summer issue and we are not a profit making enterprise so I decided to absorb the extra expense. So, you now hold in your hands the first ever 56-page issue of Current Notes. I did, however, want to point out the economics of the situation lest anyone come to expect future issues to remain this size. Club dues have been $15 for the past 6 years. This newsletter is funded largely by $12 of those club dues. While inflation has increased prices quite a bit over these past many years, we have, nonetheless, been able to improve the content and expand the coverage of this newsletter without increasing the cost to any club. But everything has a limit. In September we will have to drop back down to 48 pages.

P.S. One other super change in this issue ... it was produced entirely with the new, enhanced version of ST Writer. The double columns, headers, page numbers, are all exactly as they came off the printer. No more cutting and pasting!

==

WUN for ALL and ALL for WUN

by F. P. Nagle

==

Just what is WUN? Who are the members? How do we join? Just a few questions you may have on reading the title.

Let Me Introduce Myself.

I'm Frank Nagle with the Bay Area Atari Users Group (BAAUG) in Sunnyvale, CA. I'm also the interim Vice-Chariman of WUN, the Atari Worldwide Users Network.

What Is WUN?

WUN was started during the end of 1985 by Antic magazine to fill the need for a worldwide network of Atari users. Over the course of a few months time, the reins were passed from Antic to User Group representatives to carry on with the idea and concept. Elected as Chairman was Joe Waters of the Washington DC Area ACE, and editor of the famous Current Notes newsletter (more like a magazine). Joe and I were elected interim officers by user groups and business representatives from around the country to get WUN off the ground.

Who Are The Members? / How Do We Join?

If you are reading this article in the Atari User Group Newsletter, then you are a member and probably didn't even know it. Membership, which is free, is open to any registered Atari user group. If you are reading this in some other newsletter or magazine, then joining is as simple as registering your group with Atari.

OK WHAT DO THEY WANT NOW?

As interim elected officers, our duty is to provide for an orderly transition to a full elected board for WUN. For this task we need your support (no not money, just a little time). As the Marines would say, we are looking for a few good groups to be nominated as WUN Board members. Do you know someone that fits the bill? Are they active in the Atari community in your area? Do they have some time to "spare" for WUN activities? If you do know someone like this, why not nominate them for board membership?

WHAT CAN WUN DO FOR YOU?

Late breaking news, disk of the month, etc. etc. etc. You've heard it all before. BUT WAIT! WUN has on-line monthly meetings on CompuServe in the ATARI 16 SIG. Present are members from around the country, as well as representatives from many of the companies supporting the Atari line of products. It's here that you can "talk" to them and present YOUR views and ask the questions asked of you by your group members. That's what I call late breaking news.

Disk of the Month -- I know a lot of groups have this, but what about the overall quality. We at WUN are working to put together the BEST OF THE BEST! It may not be a disk a month, but we promise to give you the QUALITY YOU DESERVE! Currently in the works are a Word Processing Disk for the ST, an upgraded, enhanced version of ST Writer being prepared by a user group, a public domain accessories disk and a series of graphics disks so you don't have to spend a lot of hard-earned dollars downloading from various BBS's around the country. You can help here also, by providing your quality programs for distribution on a national basis.

How Much Is This Going To Cost Us?

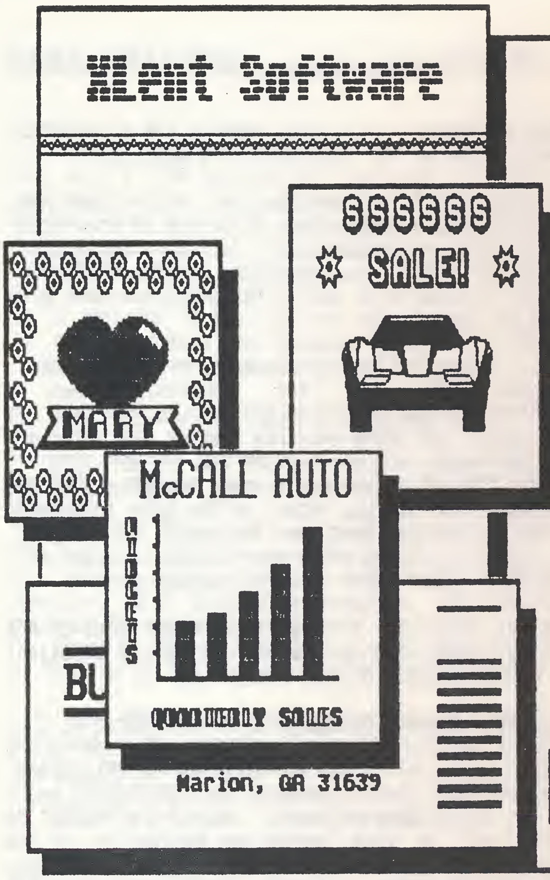
Well, the price is right. 5-1/4" disks for the 8-bit line will run $5.00 (each group only has to buy one for their own library), and 3-1/2" disks will run $8.00 (again, you only have to buy one). Once you have purchased the public domain disk, you are free to add it to your library of disks for sale to the members. You support WUN AND YOUR group. Disk sales help to raise the needed cash to keep groups going and growing.

Who Do I Contact?

For membership registration, contact Sandi Austin, Atari User Group Coordinator, at Atari (U.S.) Corp., 1196 Borregas Avenue, Sunnyvale, CA 94088.

For ordering the Disk of the Month - (enclose payment please) - Bay Area Atari Users Group, c/o Frank Nagle, P. O. Box 50439, Palo Alto, CA 94303.

The first disk will be available by the time you read this, and should be an indication of the type of quality disks to be offered in the future.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ATARI SCUTTLEBITS

by Bob Kelly

The response to the Current Notes survey conducted over the past few months has been overwhelming. My fingers as well as those of John Lauer and my wife are fairly worn out from typing in data. Needless to say, if I had to do it over again, I would think long and hard about such an undertaking. But without doubt, I would more carefully plan the overall survey design permitting the responses to be more easily keyed into the database.

The results were never intended to represent a cross section of the U.S. home computer market. Rather, they do measure the interests and commitment of Atari computer enthusiasts. In other words, the survey is skewed to those that already own an Atari computer and who have above normal interests in its operation. This does not lessen the importance of the results either to you as a user or to Atari.

The findings will be presented in several articles. This is the first installment of the series.

Of the total respondents, only three quarters were from Washington D.C., Maryland, and Virginia. Because of Current Notes' national exposure this was not unexpected, but the number of responses from foreign countries was a surprise. Nine out of ten responses were from the 19-55 year old age group with the remainder classified as either teenagers or retirees. As for average annual income, 41% of the respondents earned $35-55 thousand per year while 16% earned more than $56,000 per year. The percentage of respondents whose per capita income is above $56,000 far exceeds the national average. Quite bluntly, Current Notes' advertisers are getting bargain rates for access to a prime audience. About 36% of the respondents work for the Federal Government with those employed by corporations a close second. I did receive several complaints from university professors stating no category was included for the educational profession. My apologies. However, indirectly, it was a valuable omission supplying further insight on Current Notes' readers.

The hardware set-up for over 40% of all respondents began with an Atari 400 or 800. This illustrates the continuing "hard-core" support for Atari products in the user groups (supposedly a given since Atari states it is relying upon user support). Add to this the 30% whose first purchase was an 800XL and you end up with 70% of the respondents buying a product produced by Atari's previous owner -- Warner Communications. Of the remaining users, 20% started with the 130XE. Atari STs make up the smallest category and represent only 8% of the total respondents. Implicit to this result is the fact that user groups have to do a better job of reaching and appealing to the new Atari/ST owners. One of the MAJOR findings was that over 37% of the respondents owned two or more Atari computers! Of those who own a second Atari computer, one third owned a 130XE with upgrades to an ST occurring in about 26% of the cases. First time purchasers (new to Atari) of the ST are fewer in number than those moving up from the 8-bit Atari market by more than 25% Simply put, Atari sales have been significantly aided by users upgrading from 8-bit systems.

Almost 60% of the respondents had more than 2 drives. One quarter of these had 3 or more drives. All respondents to the survey own at least one disk drive. It is clear that the Atari magazines who constantly produce somewhat lower grade programs/games so they can run on cassette systems, i.e. less memory, are way behind the times and are not really serving the majority of subscribers. When in the heck will they wake up?

I had been led to believe that most Atari users hook their computer into a television. The fact of the matter is that roughly three-quarters, let me repeat that, almost 75% of those who responded to the survey own monitors and for the large part, that means monitors with an Atari 8 bit system.

The communications revolution continues. Approximately 65% of the respondents own a telecommunication device although over 70% of these are 300 baud modems. Of those that has modems, one third own an Atari, 18% Hayes, and another 18% own the MPP-1000. I would have thought Hayes had a lower percentage of the Atari market. No doubt, Atari's decision to produce modems with enhanced features is right on target. Atari's plans to produce a low cost 1200 baud modem will meet with spectacular sales success (projection).

Finally, only 7% of the respondents owned an ATR 8000. This comes as no shock. It was an excellent product, but CP/M 2.2's days are numbered.

The last hardware category to be considered at this time is printers. Printers are big business and a substantial source of income for computer manufacturers. Amazingly, 95% of the respondents own one printer and 1 out of 6 own two or more printers. One of the "facts" we wanted to test in this survey was whether or not the Epson mystique of market dominance was real. The answer is a qualified "yes". Almost one quarter of all respondents own an Epson. More importantly, they were all first time buyers. However, coming up hard and fast and tied for second are Star Micronics (Gemini) and Panasonic, each with about 19% of the total. Atari and Prowriter each represent about 8% of the installed base. If you consider individuals who bought a second printer, the only manufacturer that appears to be affected in terms of market share would be Atari. Their initial 8% share would rise to 14% This phenomena may be the result of Atari trying to clear out its old printers over the last 6-9 months at very attractive prices.

Atari owners have lots of software. An unsophisticated gauge is the total number of disks in an individual's library. Approximately half of all respondents own MORE THAN 100 program disks. The popular perception is that most of these disks probably are games.

Current Notes was interested in finding out what software is actually used frequently plus the buying intentions of the users in the immediate future. We first asked each respondent for a ranking of the three most frequently used software programs. I expected an array of different programs with little, if any, concentration. The results were quite the opposite for programs placed in either category one or two. Those selected as the number one software choice were:

- Atari Writer
- Letter Perfect
- Paperclip
- Syncalc
- Print Shop
- SynFile+
- ST Writer

AtariWriter was by far the most popular program receiving 2 1/2 times more nominations than the second place choice, Letter Perfect. Letter Perfect then out distanced the third choice by a ratio of almost 2 to 1. Without doubt Atari is doing it right with Atari Writer! The second place finisher, Letter Perfect, by LJK, is a perfect example of an excellent program succeeding despite the manufacturer's inability to market the product to its maximum advantage. Letter Perfect, among all the major word processors, is the only one still not out with a 128K upgrade for the 130XE. I must add LJK's customer service via phone is excellent. Batteries Included with PaperClip scores well. I am surprised that Homepac (Hometerm) did not rate better with the users. Broderbund placed with SynCalc, SynFile and Printshop programs. Finally, ST Writer is the only 16 bit program to be included in the top rankings. Would you believe it is public domain and released by Atari! Note there are no games in this first category.

d, the only major additions to the list are Data Perfect by LJK and various Database programs for the ST. Data Perfect scored exceedingly well in this listing. Data Perfect remains probably the best all round 8-bit database. The other surprise in the second choice category was the exceptionally strong showing by SynFile+ and SynCalc. More people mentioned these two programs in the second round than in the first. Obviously users consider word processing programs more important than Database/Spreadsheet programs. Again, in this category, no games scored significantly to warrant their inclusion at the top of the list of most frequently used.

The third and final selection was a hodge-podge of software. No amount of statistical correlation would reveal new information at the micro level. However, it is interesting that at this juncture games begin to show up and comprise about 1/4 of the selections.

Next, we wanted to know the next three planned software purchases. Here is where we get some sharp divergence from the rankings above. Those programs most likely to be purchased (regardless of whether ranked 1,2, or 3) were:

- Typesetter/Rubber Stamp
- SynFile+/SynCalc
- Atari Writer+
- Print Shop
- H&D Base
- DEGAS

Letter Perfect and Paper Clip dropped completely from the top rankings (although Paper Clip received more nominations than the norm). Letter Perfect/Data Perfect's lack of advertising may be catching up with them. Atari Writer+ on the other hand remains popular as does Printshop with the new graphic disks. Both of these programs received an equal number of responses. SynFile+/SynCalc continue among the most desired programs. Broderbund has marketed these programs well. Then, of course, is the big surprise. Xlent software with its Typesetter and Rubberstamp programs received the highest number of nominations. These are excellent programs but one can only wonder whether this reflect local or a national phenomena? ST programs are figuring in the top buying decisions of the future. The windfall for dBMAN may be considerable now that Mirage, U.S. distributor of H & D base, has gone out of business. Degas by Tom Hudson is certain to be a standard and an upgrade will be available soon. Since few exceptional commercial word processing programs have appeared for the ST, they do not figure prominently in buyers' software plans. The games which received nominations are Ultima IV, Gunship, Flight Simulator, and Silent Service (Microprose Software is doing well.

The bottom line to all of this is that the respondents spent $1.1 million for hardware - excluding software, etc. Repeat $1.1 million! I will examine the financial aspects more in the next column. Also I will look at what computer systems people use at work? More on the profile of Current Notes' readers. What is your favorite source for software? Do we have a significant number of software PIRATES?

Finally, my favorite response to a survey question .... an individual picked as his most crucial software purchase, a 'speling checker' program. Have a great summer!

ATARI RESOURCE

by M. Creighton

A VISIT WITH JOHN AND SUZY LINTON OF L&Y ELECTRONICS

Over the next year CURRENT NOTES will attempt to highlight a number of Atari resource centers which are available to WAACE in the Washington DC area. This month the spotlight is on John and Suzy Linton, owners of L&Y Electronics, 13670 Jefferson Davis Hwy, Woodbridge, VA.

Q: John why don't you begin by describing how L&Y Electronics is organized?

A: Well, Suzy is the president of the corporation and she handles the account receivables and the billing and I do the technical work. She handles most of the sales work up front. She's the one who actually buys most of the merchandise in the store.

Q: How did you decide to get into the computer business?

A: Originally, I started off in the US Navy. I was on submarines and involved in electronics. Once I got out I went to work for a company in Tennessee which made nuclear scientific equipment. They started using processors in their control equipment and that's where I got most of my early experience. Once I moved up here, Suzy's family gave us the opportunity to start the business. I started by working out of my house repairing TV's and then moved in here with the intention of eventually getting into the computer field. We opened L&Y in November of 1981 as a TV repair shop and then brought out the first Atari video games in March of 1982. That's also when we became a service center for Atari products. Then in July 1982 we began selling Atari 800 computers and software. I think we started with just four software programs. We also dabbled with Texas Instruments computers at first but we were never that strong into those systems.

Q: Is Woodbridge a good location for for selling computers? Weren't you afraid that too many people would think it was too far out of the city.?

A: The major reason I located here in Woodbridge was because a TV repair business which had been located here closed down and my father-in-law suggested I move in and pick up the TV business. Then, too, the closer you get to the hub of DC, the more expensive the rent. This is a good location for keeping my prices reasonable without the high markup I'd have to charge if I were closer. I have a good local customer base in the immediate area and because computers are such specialty items, many customers are willing to drive long distances if the selection is good and the prices are right. A lot of our Maryland customers come out once every six weeks or so, for example. We do make a big effort to stock and sell current items. That's important in this business. We do some mail order business, but it's only approximately 15% of our total business. Most of our business comes from walk-in traffic.

Q: You've been selling Atari for four years now; what is the most significant difference <u>you've</u> noticed since Jack Tramiel took over Atari?

A: Well, the Atari was always a good selling item right across the country but because the management of Atari was poor, they brought out products that people didn't want. Atari now is a privately held corporation. They can't introduce products as fast as Warner Communications did because they don't have the money but what they do produce is very good, very solid. I think it's going to take Jack Tramiel three or four years to get Atari back to the prominence it held when it was at its peak. Part of the problem is that Atari is still fighting the image of being just a game machine. I think he's done very well in changing all that. He hasn't been introducing many games. Instead, he's concentrated on business applications to demonstrate that Atari computers are capable of serious work.

Q: Since you offer service as well as sales at L&Y, how would you rate Atari's technical support in terms of available service literature, troubleshooting techniques, failure rates, and such?

A: Well, we repair both Commodore and Atari and, as far as serviceability is concerned, I would say that Atari is by far the better made product. As for durability, I can't give you an exact figure but a lot of my customers still have their old 800 computers and they're still working fine. The quality of the 800 is probably better than that of the newer Atari computers but then the original selling price of the 800 was pretty high compared to the newer models. I personally own an 800 which I bought from a customer who wanted a 130 and it's still working fine. Of course, the 130 gives you quite a significant increase in memory and it's smaller and lighter and has a better operating system.

As for the technical literature, we only recently received our 130 schematics from Atari. But even without the scematics, it wasn't a problem for us because the machine is very close to the 800XL in architecture. The 520ST, on the other hand, had a very good technical support package from the beginning. The schematics are very good, very large and the system is designed so that I can troubleshoot one 520 with another 520. The service literature is very good but then it has to be because right now the dealers have to be the primary service facility for the computer. If we sell them, we're responsible for them.

Q: How about custom work from third party vendors? Say I had a custom chip I wanted installed in a computer that wasn't a normal upgrade and I was afraid to try to install it myself. Could you do that? Do you have a flat rate for custom work?

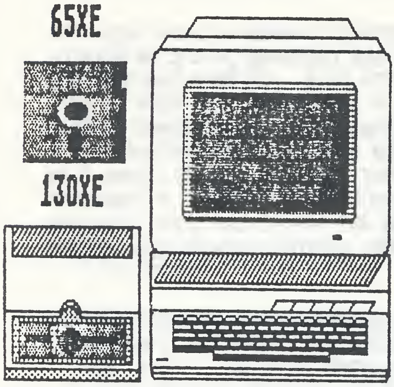
A: We do that on a case-by-case basis. Most anything that fits on the Atari, we already sell. We have had customers who have bought products elsewhere and we have installed them. I can't give a flat rate because there are just too many variables involved.

Q: Let's get back to the sales area. Can you say which computer system you sell the most of right now?

A: I would say the 8-bit series is still best seller. There are still a lot of people buying the 8-bit machines like the 65XE and the 130XE.

Q: Would you say that sales of the ST are continuing to accelerate or do you find it is starting to level off?

A: The sales of all Atari computers have been steadily increasing since Jack Tramiel took over the company. There wasn't a big jump in sales but there has been this steady increase in both the 8-bit and 16-bit lines. He hurt Commodore two years ago by dropping the price of the 800XL from $179 to $119 and that accounted for a big



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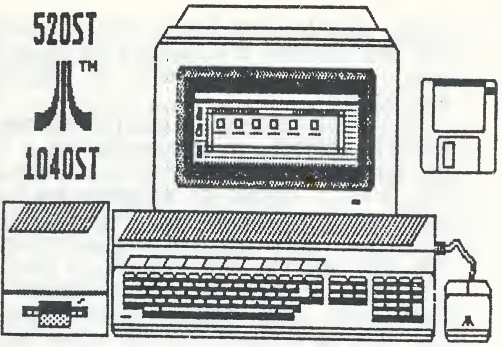

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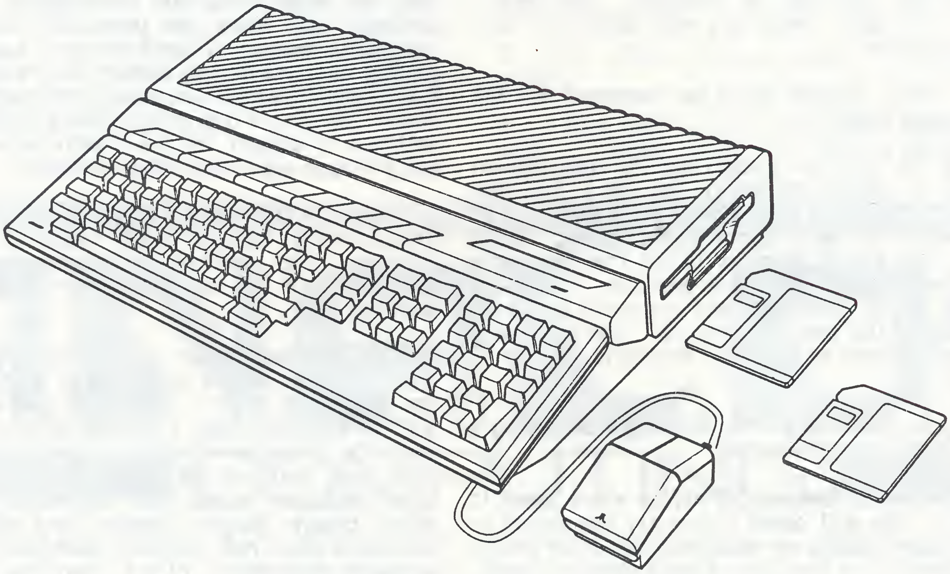

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TECHNICAL DATA:
- MC68000 microprocessor; 32-bit internal, 16-bit external architecture.
- Clock speed 8 MHz.

REQUIREMENTS:
ATARI RGB or Monochrome Monitor.

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surge in sales over his first Christmas season. The 520 and 1040 machines are really picking up with professional people since the software is beginning to be widely available.

The 8-bit customer is usually someone who hasn't had a computer before or someone who has a friend who has one or perhaps has kids in school who are using them. There are also a number of customers who really can't afford anything more expensive. They appreciate the fact that for under $300 you can have a computer in your house. The 520 and the 1040 customer is usually a professional and most of them have had a computer before. I do get some first time computer owners buying the ST machines but they are usually either people who didn't choose to buy a computer before because the machines available weren't capable of handling their needs or the ones that were adequate were just too expensive.

Q: Why should someone buy an Atari 65XE or 130XE now?

A: Well, the main reason is cost. For $300 a customer can have a beginning computer system which includes a disk drive. Those systems also have a good software base including professional packages like Syncalc, Synfile, Syntrend, and Paperclip and Atariwriter word processors. It seems to me that most people who buy home computers generally have two serious purposes in mind: word processing and spread sheets. The data base work doesn't seem as prevalent to me. For spread sheet work, a 130XE and Syncalc gives you 89k of storage. The 16-bit machines, on the other hand, are more expensive, more like $800 for a system.

Q: Which of these systems would you recommend for the first time computer buyer?

A: If there's no special reason pushing them into an 8-bit machine, I would recommend the 520 or the 1040 because, for one thing, it's only been out since July 85 and the software is really beginning to appear. Since software cost for the ST machines is not that much more than the software for the 8-bit machines, the 16-bit machines are a better investment and you would be buying at the beginning of the model life-cycle. There are more than a hundred pieces of software available for the ST machines now.

Q: What do you think are the advantages of buying a 1040ST over a 520ST and vice versa?

A: The 1040 is slanted towards the office where space is at a premium. The unit doesn't have all the cables or the external power supply or external disk drive of the 520 so its footprint is smaller. From a service aspect, the 520 is going to be a little easier to repair and the external power supply means the heat is kept out of the unit. Most of the problems I've seen are in the power packs and, with the 520, a customer can bring in the bad power supply since it's external and we'll either fix it or sell him or her another one and they're off and running again. So they each have merits of their own; it just depends on what you want the machine for. One other thing to keep in mind is that we can now upgrade the memory of the 520 to the same size as the 1040 for about the same cost. We do intend to stock both the 520 and the 1040.

Q: John, for a store the size of yours, how many computers do you need to sell a month to make a go of it?

A: That's a really hard question to answer because it varys so much from month to month. At Christmas time we sell the most and things slow up quite a bit for a couple of months after that. We have to sell a little bit of everything because we can't depend on selling the computers alone to make the business go and we have to support the product after the sale. In this business you can't put all your eggs in one basket. We have to sell computers, supplies, printers, paper, and ribbons so that if we have a slowdown in one area, another area will pick up and carry us through. For instance, at Christmas time a lot of people buy computers and then in a couple of months when they've figured out how to use them, they buy software and printer paper. That way things tend to average out.

Q: Turning to software for a moment, how do your software sales compare between the 8-bit and the 16-bit machines? Who's buying software right now?

A: Right now I would say the 520 owners are buying more software per owner because there hasn't been a lot of software available until recently. As far as dollar volume, we sell about the same for both lines even though there are many more 8-bit owners. The 8-bit owners are probably being more selective because their software base is quite large. The good software still sells.

Q: A lot of 8-bit Atari computer owners are increasingly concerned that the handwriting is on the wall for their machines. What do you think about that?

A: Well, We've sold more 8-bit machines in the last year than we have in the last three years. There's a lot of software out there for the 8-bit line, both commercial and public domain. I don't think it's dying out; I think there's still a strong market for the 8-bit machines. I don't know how many new owners there are compared to the number of people upgrading their systems but I intend to continue to support the 8-bit machines with both hardware and software until they stop selling.

Q: Some of the initial software for the Atari 520ST was disappointing because it was rushed to market, resulting in bugs, poor design, and inadequate features. How do you feel about the new software being released for the ST machines now?

A: The software which is being released now has had the opportunity to mature since the ST machines have been out for nearly a year. There were some early problems but most of them have been fixed and many of the really early software packages have been significantly upgraded with additional features and better documentation. There were some companies which put out really inferior products which people bought because there wasn't anything else available but now we don't even carry those companies' products because I didn't feel the products were very professional. We try to be selective in what we carry and if a product has a bad reputation, we won't carry it.

Q: Do you think the proposed series of add-ons for the ST (CP/M, Apple II, MS-DOS, Macintosh) will sell? Will you carry them all?

A: We'll carry them but I don't know whether they'll sell or not. I think the ST software coming out now is better software than that available for other machines. IBM is the best supported business software but I don't think they focus on the people who buy ST computers. In addition, the software prices for the IBM and Apple tends to be more expensive than the software for the Atari. It's nice right now while the software base for the ST is still limited, but by Christmastime this year there will be a lot of software available for the ST machines. Of course, it will be nice for those people who have an IBM in the office and an Atari at home because they'll be able to run their IBM software on a machine that's cheaper and faster than an IBM. I think it'll be a transition thing until the software base for the ST has grown sufficiently.

Q: Will you stock Apple and IBM software once the add-ons are available?

A: No.

Q: If you were Jack Tramiel, what would you do differently?

A: I think he's done a fine job in taking a company which was in bad shape and turning it around in such a short time but I do have one suggestion. He is trying to do direct sales to dealers and he doesn't have the people to support it. For instance, if I call out there, there's no one person I can talk to who handles my account. There are no commissioned salesmen and people who work on commission tend to be more energetic to get things done. Salaried salesmen just don't have the same incentive. It's the whole marketing philosophy. They've tried marketing companies and they haven't worked. I think he needs to get more of an inside sales staff if he's planning to go dealer direct.

Q: How do you feel about the mass marketing strategy for the 520ST?

A: Well, if it goes to a reputable company like Sears they'll enhance the product because of their good name. But if it goes into discount stores or toy stores, I think it'll hurt the product and tarnish the company's image. It might increase the sales of the computer but it'll increase the problems too.

Q: Why should someone who has a choice buy an ST or a 8-bit computer from you when he could save money by buying it from a mass merchandiser?

A: First of all, will there even be a price difference? I don't think Atari will kill off their dealers by cutting prices to the mass merchandisers too drastically. And buying the hardware is only the beginning; sales of supplies and software and instruction are just as important. And service will only be available from dealers; most of the mass merchandisers won't be able to service the machines they sell.

Mass merchandisers also have the power to hurt Atari because if they don't pay their bills on time, Atari could be out of business. On the other hand, with small dealers, if one doesn't pay their bills on time, it doesn't hurt Atari as bad. These are some of the things Atari has to consider about going with mass merchandisers. They could see a short term profit turn into a long term loss.

Q: Suzy, why do you think the readers of Current Notes should buy from L&Y Electronics?

A: Well, I guess everybody's the same way I am. I'd rather people come to my store than go to another store. I only carry Atari related products and I sell them at very reasonable prices. Any new product that comes out related to Atari we try to get for our store, so people can depend on us.

Q: What plans do you have for L&Y Electronics in the future?

A: I hope that in the future we'll make enough to expand into a larger store to provide better service to our customers.

ATARI IN LONDON
by Milt Creighton

Ever since I became an Atari convert by buying a 520ST, I've heard how popular Atari computers are overseas. I've read reports that at least one West German computer magazine had named the 520ST the "Computer of the Year" and stories that it was the best selling computer in Germany. Recently, I had a chance to take a business trip to London and investigate these claims on my own. I had visions of computer stores piled high with new software not yet available in the States and add-on devices of unimaginable power and sophistication. After all, the Europeans have had the 520ST longer than we and have had ever so much longer to explore the possibilities of this incredible machine. So much for pipe dreams.

The reality of Atari in England is that it is nowhere near as visible as some of the European machines such as the BBC, the Amstrad, and the Sinclair. I was able to find a couple of Atari magazines (even one entitled ST User!) but nowhere was I able to locate an Atari dealer in London. I tried the yellow pages, I looked in the newspapers, and I read the computer magazines- but all to no avail. There were dealers in Kent and there were dealers in Sussex. There were even Atari dealers in Scotland but nowhere could I find a dealer in London! There were articles in the magazines describing what a big splash Atari had made in a big computer show in March but still I couldn't find a single local dealer.

Finally, in desperation I bought yet another magazine, one not devoted exclusively to Atari. In it I found an Atari advertisement which gave a UK toll-free number to call for the nearest Atari dealer. A subsequent chat with a very pleasant young lady provided me with five London dealers and armed with a fistful of addresses and my Mastercard, I set off on a quest for my own very special grail, one that any hobbist would understand.

In London most of the high tech electronic stores can be found in one area along Tottenham Court Road. Most of them sell music synthesizers, stereos, radios, calculators, and electric typewriters. Many also sell computers and a select few sell the Atari. Three of the dealers I had been given were located along this strip. Two of them were of the type described above and, amid the piles of watches, adding machines, and calculators were a few computers. One of the stores had a single 1040ST but no disk drives or Atari monitors. Another of the stores had a computer section and among the BBC machines, the Sinclairs, and even a couple of Commodores, was a complete 1040ST system. There was some software, but precious little, and nothing I hadn't already seen. The last of the Atari dealers on Tottenham Court Road was Silica Shop, an Atari specialist and quite obviously newly arrived in these quarters. This was the largest computer dealer I had yet seen and there was quite a lot of software compared to what I had seen elsewhere.

It came as something of a shock to me to find that the software for the 520ST, 1040ST, and the 130XE computers was almost all US-produced. Where were all the UK programs I had been expecting? True enough, there were several UK programs on display, mostly by Kuma Computers Ltd, but nothing that fired my blood and brought out the buying frenzy I had expected. It is also a sad fact that software from the States is translated directly from dollars into pounds in the UK and is therefore, half again as much. I decided to visit the next store on my list.

By far the largest of the Atari dealers in London is the computer section of Selfridges department store. The store itself is a big city block on all sides and has four or five floors and a basement. In Selfridges one can find nearly anything sold in London, from china and fine crystal to London fashions for both men and women to exotic foods from all over the world. Other than Harrads, Selfridges is the largest department store in London, though perhaps not quite as well known as its competitor.

The computer section at Selfridges sells a number of different machines and Atari is well represented. The salesmen were extremely knowledgeable and very interested in new Atari developments in the US. One informed me that Selfridges was in the process of adding an entire new section devoted to the ST line because of the interest Atari had generated at the recent show. Then he demonstrated two new programs due to hit the market very soon in the UK.

One was First Word Plus, a second generation GEM-based word processor which incorporates an expandable 35,000 word spelling checker allowing the spelling of a document to be checked from within the word processor. In addition, the program also includes a "snapshot" feature which allows one to frame an area of any GEM screen and save the contents to disk in a graphics file. The graphics file can then be incorporated into a First Word Plus text file.

The second program demonstrated by the salesman was also a new word processor. It is called Boffin and the minute I saw it, I knew I had to have it.

Boffin is also a second generation GEM-based word processor, but there are significant differences between it and First Word Plus. First, Boffin doesn't have a spelling checker; you'll have to use someone else's program for that. Second, Boffin won't handle double column text so Joe Waters will have to continue his search for the perfect word processor. Third, Boffin doesn't permit one to define keyboard macros, a highly desirable feature in my book. But for all Boffin doesn't do, it's still the best word processor for the Atari ST line I've yet seen. The reason I say that is because what Boffin does, it does well...and it does a lot. Permit me to elaborate on its more unusual features.

Boffin displays underlined, italics, bold-faced, enlarged, and up to two user-defined text styles on the screen without requiring one to resort to embedded commands. It also permits the use of up to 9 line headers and footers. Boffin's real claim to fame, however, is due to its ability to create and insert graphics into its text files. This is a feature most of the second generation word processors will have, but, in Boffin, it seems more fully developed than most. As expected, you can insert Degas, Neochrome, or Doodle graphics, but, in addition, you can alter or create graphics from within Boffin as well. Boffin has a drawing mode and a number of special fonts for use on graphics images. These include bold, italics, lightened, and outlined fonts- or, if you desire, you can create your own. The size of each font can be changed to make it larger or smaller and each can be rotated 360 degrees through steps of 90 degrees so you can write up, down, or even upside down. There are a number of shapes already built into the program for use with the drawing mode. They include circles, boxes, and frames, but the most unusual function of this mode is Boffin's ability to automatically create pie charts and bar charts from raw data.

(Continued on Page 13)

SINGAPORE SLING'S

by David Hsui

Did you know that there are two versions of the 520 and 1040 ST? Do you know who makes Atari's color monitors and why? Do you want to install a non-Atari monitor on that ST? Stay tuned.

Numerous questions have been raised about the origins of Atari ST monitors. Initially, the color monitors were made by THOMSON specifically for Atari and were printed with the name "THOMSON for ATARI" on the lower panel. They are beige with a grey colored border around the screen. Atari contracted for a first shipment of 1,000 units of this monitor all of which were destined for the European market as they were for 220 volt systems. These are excellent color monitors and have additional capabilities such as composite video and digital RGB inputs. Though the sound reproduction is not as good as the SONY monitor I use (more on this later), it has an output for an amplifier or earphone. The resolution of the Thomson monitor is as good as my Sony KX - 14CP1. Like the Sony monitor, its multi functions allow the monitor to be used for nearly all brands of computers on the market. In case you are unaware, Thomson is well known in Europe as it is the largest electronics manufacturer in France.

Atari was late in its payment to Thomson for the units it ordered. I have been informed that payment was made after a six-months delay and orders are continuing. Naturally, the monitors are more costly and of higher quality than that of the monitors made by Goldstar in Korea for the U.S. market. In any event, the 220 volts European version of the Atari monitor will also in the future be made in Korea when the contract with Thomson expires. One of the sticky points was that Thomson wanted to retain the monitor's multi-functional features in order to hedge themselves against contractual defaults and hence the monitors were more expensive. Here in Singapore we tested a Goldstar monitor and found it to be of poorer resolution and sound reproduction than the Sony or Thomson.

As discussed above, the ST can be adapted to a non-Atari monitor. All one needs is an industry standard analog RGB plug commonly referred to here as a "scudd plug" which plugs into the analog RGB outlet of the monitor (editor's note: Kenwood sells them locally). For the Sony monitor (KX - 14CP1), you will have to fit a resistor between two of the pins inside the scud plug but for the Thomson monitor, the resistor will have to be soldered on the main computer board itself.

The two different versions of the ST, I am aware of, are for the U.S. market and for the European (more specifically, the British) market. Here in Singapore, both versions are available, the external differences between the British version and the U.S. version are that the British version has an additional key between the left Shift key and the Z key. This extra key is the backlash (\) key. The backlash key on the U.S. version is a # key on the British version, while the # key on the U.S. version is above the number 3. Beyond the cosmetics, what does this all mean? If you were to install the British version of TOS in ROM on a U.S. version ST, it would play havoc with such programs such as Compilers, VIP, and ST Writer. Furthermore, the color monitor would display a screen which is not centered but shifted to the right even after manual adjustment of the color monitor is made. On the monochrome monitor, the screen would be centered with no visual difference between the two versions.

Generally, we found that some programs will not run well with either version of TOS on ROM. Here in Singapore, we are wondering whether you in the States are having the same experience. Some of the programs which have difficulties running on both versions of the ST with TOS on ROM are - Mince, Michtron Utilities, and ST Copy version 1.5. Both the 520 and 1040 ST's seem to have this problem.

Mr. David Hsui (pronounced like "she") is a consultant to several large industries, e.g. textiles, as well as the Singapore stock market in the Far East. He resides in Singapore and is a personal friend of columnist Bob Kelly.

London (Continued from Page 12)

The bad news is that Boffin retails for 100 pounds sterling which is about $150 at current exchange rates and I wasn't able to find out whether it will be made available in the US, although that seems likely. I also doubt whether it will be successful at any price over $100 and even that seems steep as it will be in direct competition with Paperclip Elite whenever that program becomes available.

The final stop on my list was to a computer dealer located just behind Selfridges, Computers of Wigmore, on Wigmore Street. This store was more like many of the small computer stores commonly seen in the US (though they didn't have nearly the amount of hardware or software in stock at L&Y). I found the proprietor both pleasant and knowledgeable and he had a retail copy of Boffin!

After visiting all the establishments on my list I was forced to conclude that Atari is just now making a big impact in London. Atari seems to have had a strong presence in other parts of England for some time but the fact that the dealers in London haven't been established long enough to be listed in the London yellow pages says a lot. In London the computers one sees are Sinclairs, BBC, Amstrad, and the occasional Apricot and Commodore. But that is changing. The Atari show in March has definitely had a big impact and several of the Atari dealers I visited are eagerly expanding. In addition, the UK has had a magazine with wide distribution devoted exclusively to the ST line for more than two months, something that won't happen in the US until the end of this summer.

I also met two Atari computer owners from Germany and was assured by both of them that Atari is alive and well there, just as all the news reports have said and I did see quite a lot of public domain software in German. Many of the UK magazines described future versions of the ST line (such as a 520ST with an internal power supply and disk drive) to be released in Europe which have not been mentioned in US publications. And there is quite a lot of good UK software, even if it tends to be inundated by the flood flowing from US software houses just now. From my perspective, Atari, and in particular the ST line, is doing well in the UK overall but still must establish themselves in London. There is a wealth of evidence that this is happening right now and that the Atari Computer show last March was a major contributer to that success.

Milt Creighton, a graduate of the US Military Academy, is an electrical engineer with the US Army designing and supervising the testing of new electronic systems. Milt's hobbies include microcomputing and fiction writing.

ATARI AT CES

June 1-4, Chicago, Illinois

by George Langworthy

520 ST SUMMER SALE - $599.95 suggested retail. Retailers who ordered by June 30 will receive a monochrome monitor($199.95) free with each 520ST computer and disk drive purchased. This amounts to a 25% reduction in price. It is avallale to both mass merchants, such as Toys-R-Us, now beginning to stock the 520ST and computer dealers. There are no limits on quantities. This means that the consumer can purchase a state-of-the-art Motorola 68000-based computer, drive and monitor for about the same as the 8-bit Commodore 128. No information is avalable as to whether this price reduction will be continued.

130 80-COLUMN BOX - XEP 80. The long-awaited 80-column board, to retail for $79, was shown in preproduction form at Summer CES. The XEP80 will allow 80-column output to a standard monochrome composite monitor and will have a standard Centronics parallel printer port. It plugs into one of the joystick ports and is compatible with all Atari 8-bit computers. Fall availability asearly as September is planned. This will open up the student and office in home markets to the $149.95 list 130XE.

STARTER KIT FOR 65XE and 130XE. As previously announced, the 65XE(64K) and 130XE(128K) are available in a complete starter package at $349 and $399 respectively. This includes CPU, 1027 printer, disk drive, AtariWriter Plus, Home Filing Manager, Music Composer, Defender and Star Raiders.

"The Atari XE computer is the ideal choice for a beginning computer user or anyone looking for an inexpensive word processing system. The XE line is a less-expensive alternative to the 'personal word processing' systems now on the market," says Atari President Sam Tramiel. "And for the price of an electronic typewriter, XE customers receive a full-fledged computer, not a limited system." The XEP 80 column and Centronics parallel port device will allow the XE to compete as far as quality of output in the under $1,000 light-duty word-processing market.

65XE PROMOTION. To attack the beginning computer and game user market, Atari will sell through Christmas the $99 65XE with a joystick, Star Raiders, Pac Man, Donkey Kong, Sky Writer and Atari BASIC. This is another indication that the new Atari is pushing the established products at very competitive prices into the consumer channel, which both broadens the market and increases the cash flow with no additional design or tooling expense.

EXPLORER MAGAZINE TO BE EDITED BY DAVID AHL. With Neil Harris' assignment to other duties EXPLORER didn't get published. The cancellation of CREATIVE COMPUTING by parent Ziff Davis freed founder David Ahl and Managing Editor Elizabeth Staples to pursue other activites. Atari Corp. announced June 1 at CES that Ahl and Staples would be editing and publishing a revived EXPLORER on a bi-monthly basis with the next issue to be dated "July-August 1986." Plans are to take it monthly during 1987. Ahl is looking for articles of interest to the 8 bit community. If you have written for your user's group newsletter and would like to submit articles or article proposals write: Elizabeth Staples, ATARI EXPLORER, 7 Hilltop Road, Mendham, NJ 07945. Include a self addressed stamped envelope with correct postage for return of your submission.

2600 AND 7800 VIDEO GAMES. In 1985 Atari sold well over one million 2600 video games very profitably without any significant advertising or promotion. The 2600 is being promoted with new games and a free high-impact plastic cartridge library holder. The 7800 is to be sold with three free 2600 game cartridges this summer. Twelve new top seller games have been licensed for the 7800, which retails for under $80. The 7800 has one-megabyte ROM cartridges which mean that the resolution and complexity of the games compared favorably with computer and arcade versions, according to Atari officials. The significance to the computer user is that the better Atari does financially and the more distribution channels open, the better Atari's chances of long-term success and continued high performance/value product introduction.

SAM TRAMIEL, PRESIDENT: REMARKS AT HOME/CONSUMER COMPUTER PANEL. "1986 targets are to sell two million 2600 video game machines and 500,000 ST computers worldwide. There are some twenty million 8-bit users of all types worldwide and they represent a substantial market for upgrade to the more powerful 16-bit machines," Sam Tramiel said in his opening remarks at a Home/Comsumer Computer paanel discussion at Summer CES.

In answering a question about future developments Tramiel mentioned the availability of a laser printer. The Unix operating system is being ported to the TT 32-bit computer by an outside developer. The CPU mentioned for the TT is the Motorola 68020. Trade publications and Motorola state that the 68020 currently has the vast majority of the merchant 32-bit market. This means that much software is already developed, and many software writers are familiar with this multi-user, multi-tasking system. It is very popular with CAD, CAM and engineering workstation manufacturers.

From COMPUSERVE'S ONLINE TODAY

ATARI TO QUIT TAIWAN PLANT (June 4) Jack Tramiel is planning to shut down Atari's production line in Taiwan. In remarks posted on a bulletin board service after he met with Atari owners in Massachusetts, the Atari chairman said that under the right conditions computers could be constructed in the US with the same cost efficiency as in Taiwan. Tramiel set no deadline for the manufacturing changeover but he did indicate the move was not in the immediate future.

ATARI PLANNING SUMMER PRODUCTS (June 5) Atari Corp. is holding some product announcements from the CES and scheduling them for latter in the summer. Compatible with the ST product line, the new products will include a 3.5 floppy with 10MB storage capacity, a super-hi-res graphics board with 1,000 line resolution and a new sound chip. Other new products are memory and multitasking upgrades as well as a new expansion box for holding the multiple upgrades.

ATARI'S 32-BIT MICRO COMING SOON (June 6) Atari has a 32-bit computer in development. The company recently signed a Unix licensing agreement with AT&T and Atari chairman Jack Tramiel has indicated that the new machine will run under Unix. When the new computer is introduced, current ST owners will be offered an option to upgrade their machines to use the Unix operating system. No release date was specified for the new computer.

--James Moran

THE 1050 DUPLICATOR REVISITED

The June 1985 edition of CURRENT NOTES carried a review written by Rick Holtzhauer, of Port Hueneme, CA, covering the 1050 DUPLICATOR, a product of Duplicating Technologies, of Jericho, NY.

When first received, CURRENT NOTES' editors decided to submit the article to the product's manufacturer for comment prior to publication with the intent of including DT's comments along with the review. We subsequently learned from the manufacturer that the software furnished with the product reviewed by Mr. Holtzhauer was the first version released (Ver. 2.0) and that versions 2.1, 2.2, 2.3, 2.4 and 2.5 were subsequently included with the hardware during the software's continuing evolution. According to Duplicating Technologies, these revisions addressed most, if not all, of the product's alleged shortcomings cited by the reviewer. Unfortunately, previous purchasers were not made aware of Duplicating Technologies' interim software upgrades, other than being advised they would receive Version 3.0 when ready for release.

Arrangements were made for Mr. Holtzhauer to receive a copy of Duplicating Technology's most recent software release with the intent of holding publication of his review until the current version of the product software could be evaluated.

We goofed and failed to pull the review as intended. Unfortunately, the reviewer has not yet received version 2.5 of DT's software as of this writing (June 16th), so a review of DT's current product cannot be included in this edition of CURRENT NOTES.

In fairness though, we are printing below Duplicating Technologies' response to Mr. Holtzhauer's original article. Pending receipt of version 2.5, CURRENT NOTES is in no position to take issue with Duplicating Technology's claim that "... the Duplicator in no uncertain terms is the most powerful copy system ever developed for the Atari, bar none... ", when used with their current software package.

* * * * * * * * * * * * *

TO: RICK HOLTZHAUER
RE: IN RESPONSE TO YOUR CRITIQUE OF OUR
1050 DUPLICATOR

Dear Mr. Holtzhauer:

I find that after reading this lengthy expose that you are quite misinformed. I neither have the time nor the energies to pick it apart paragraph by paragraph which it most certainly deserves.

First of all, the Duplicator in no uncertain terms is the most powerful copy system ever developed for the Atari bar none. If we are comparing the Duplicator to the Happy (which you said you didn't want to do, but did anyway throughout your article), let's do it!

The Happy operating system is approximately 4 years old, an antique in terms of time and copy capabilities. Duplicating Technologies does not believe the Happy operating system can cope or ever will copy all the protection schemes on the market today, 7.0 or any future revisions included.

We started Duplicating Technologies because we got tired, really tired, of waiting for Happy's 7.0. We personally believe that Happy had some nerve taking customer's money, including our own, as far back as a year and a half ago. We decided there was a better way to run a business and our intentions are to do just that, only in a more efficient manner. We're running a business out of an office not our home and we also answer our telephones. Also, I couldn't for the life of me figure out why a Happy cost $249.00. We decided to give the Atari users a choice. Now let's get on with the issue at hand.

You continuously give your reader the idea that the copy system is weak. We don't believe it was ever weak. Originally we stated our software was weak but have made continuous upgrades to our software. It gets stronger every month. We say again to you, it is the most powerful system on the market today.

Our operating system, written in 1985, has many more routines built in than our competition does. The best example of this is our ability to write 21 sectors consisting of 128 bytes each. No one has ever accomplished this. We also have the ability to copy Laser Technology in protection schemes should the need arise. A 4-year old system couldn't dream of this. The Duplicator has the ability to write a sector copier than will run at ultra speed. Let's go one step further. The Duplicator has a copier that will copy copyguarded disks in ultra speed. i.e. Our almost completed sector copy program can reproduce a deleted data mark in ultra speed. The Happy sector copy program is incapable of doing this. We have a track write routine in our operating system capable of writing a whole track in ultra speed. You won't find these features in a 4-year old system.

You made an inaccurate observation, well half of it is inaccurate. the accurate half was the time taken to write our operating system. The software was written in a hurry to fill the void until the rev. 3.0 could be completed.

The inaccurate observation was the 1983 Copyright Notice. This date has absolutely nothing to do with the 1050 Duplicator. It is the Action Language Time Library. The software was written in Action and the Action Language Copyright Notice must be displayed. We repeat, the 1983 date has nothing whatsoever to do with our operating system or software. Our operating system was designed the latter part of 1985. The Action Language is powerful and versatile. If you are not familiar with it, it allows quick, easy and efficient upgrades. It also allows our programmers to work simultaneously on the same program.

The one thing you did say that was totally accurate is that the Duplicator does not copy skew yet. What you failed to say is that except skew, Happy cannot copy anything we cannot. The Happy 1050 is incapable of copying any 20 or 21 sector format which the Duplicator will do. The Duplicator will, to use a phrase you so colorfully employed, "lift up and slap down" 20 and 21 sectors, something Happy has proven incapable of even coming close to.

Our rev. 3.0, which is running a little behind schedule, will not only copy skew but everything else on the market today except weak sector. Our rev. 4.0, which will be right behind our rev. 3.0, will copy this weak sector. Therefore, the rev. 4.0 will enable our Duplicator to copy 100% of what is on the market today. Happy's operating system can never and will never be capable of doing this. Happy's operating system does not have the ability. We will, by the end of the summer, copy everything on the market today and that's our pledge to our customers.

nny little gizmo" (if you had bothered to read the instructions first) lets you write 20 and 21 sector formats which I have explained above. This wasn't any "hardware upgrade" sent separately at a later date. This came with the Duplicator as a part of the product and didn't cost your anything extra, we supply it free. This "little gizmo" enables our customers to write this new popular protection. You called it "relatively new and actually fairly simple to copy". We say it's not new and if it's so simple, use your Happy to copy it! We are sorry you had so much difficulty putting this modification in. We talk to our customers all day long and we can honestly tell you that you are in the minority. You say you never saw a 20 sector stand alone? We ask you to obtain SPY VS. SPY, THE ISLAND CAPER or QUESTRON and tell us again you've never seen a 20 sector format stand alone.

You went into great length on how much fun the software manufacturers are going to have with the Duplicator's deprogramming incapabilities. We say to you Mr. Holtzhauer, let us worry about the software manufacturers. Let us worry if a manufacturer wants to play with its detection. That's the bottom line! Also, for your information, the Duplicator uses an 8K buffer just like the Happy regardless of what our directions say (ed note: the manual indicates 4K). Test it!

Your math, not that we're trying to nitpick, although you did, leaves a lot to be desired. Just to set your numbers straight, the rotational speed specified for the 1050 is 288 RPM. This translates into 4.8 revolutions per second on 0.2083 seconds per revolution. The duration time required for the disk to rotate the length of one sector is 170 x 64E-6=0.0109 seconds. At 288 RPMs this is 0.090/0.2083=0.0523 parts of a revolution. Please leave the math to the big boys.

Our current software does not give you the readjusted sector map into the never-never land problem you had. This brings us to the fact that since you buy your duplicator from us you might not be aware of the fact that there have been several revisions (2.1, 2.2, 2.3, 2.4 and even 2.5). Each upgrade copying more than the previous. We were completing these revisions at a rate of one every three weeks. (Ed note: the reviewer did purchase his unit through DT and the undersigned DT rep indicated they issued no notice of software upgrades to prior purchasers of record unless inquiry was made.)

We would also like to take this opportunity to tell our customers that we sincerely apologize for the delay in the rev. 3.0 which we assure you won't take a year and a half or we'll send every customer who bout one their money back. We do tell our customers that by the end of this summer they'll have to throw their Happy enhancement in the garbage because they will have absolutely no need for it any longer.

Thank you.

Very Truly yours,
Mike Carney
Duplicating Technologies, Inc.

NEW XL/XE PRODUCTS

by Jack Holtzhauer

As usual, this column is devoted to new products for the 8-bit Atari line actually appearing on dealers shelves. Readers running across products worthy of mention in the column are urged to give me a call on 703/670-6475.

P:R: CONNECTION, ICD, Inc.| 1220 Rock street, Rockford, IL 61101-1437| 815/968-2228.

ICD claims that in producing their new "P:R: Connection", a printer and modem interface for 8-bit Atari Computers, they "... created something much better than (Atari's) 850 (interface) for a lower-price. Virtually all printer software (designed for the 850) will work with the P:R:Connection, and most modem software will work without any modification...."

The Connection provides two serial ports for "R:" devices, a single parallel port for "P:" devices and standard Atari 13-pin disk-drive I/O male and female SIO ports or sockets for disk drives. No power pack is required; it is powered by the host computer.

The unit comes with a disk supplying freeware versions of two popular terminal programs, AMODEM7 and 850 EXPRESS. RSCOPE, a new version of the TSCOPE terminal program popular with COMPUSERVE users, is also included. The final program file on the disk is PRC.SYS, which adapts the device to work with some otherwise non-compatible modem programs such as HOMETERM. DOC files are also included! Priced at $59.99

PS INTERFACE, XLent Software, PO Box 5228, Springfield, VA 22150, 703/644-8881.

XLENT software calls this new release, written by David Castell, "The program that bridged PRINT SHOP with XLENT's printware series." It claims to afford the user a number of useful options, including the following:

1. Create your own PRINT SHOP fonts using your favorite drawing program.

2. Include pictures in your font (eg TYPESETTER icons), so you can have any number of pictures on a PRINT SHOP printout. This also allows you to use the outline and 3-D effects with the pictures in your font.

3. Draw your PRINT SHOP graphics with your favorite drawing program instead of with the graphics editor built into PRINT SHOP.

4. Compress full pictures or TYPESETTER icons into PRINT SHOP graphics.

5. Convert a part of a picture or TYPESETTER icon into a PRINT SHOP graphic.

6. Convert characters from any PRINT SHOP font to TYPESETTER icons so you can use PRINT SHOP fonts with TYPESETTER. Convert the PRINT SHOP characters in four sizes: normal, double width, double height, and double width & double height.

7. Covert PRINT SHOP graphics to TYPESETTER icons for use with TYPESETTER or for using option 2 mentioned above.

8. Convert pictures from your favorite drawing program to PRINT SHOP format so you can add text to them in any of PRINT SHOP'S fonts or print them in the screen magic portion of PRINT SHOP. Until now, the screen magic portion of PRINT SHOP was only good for adding text to kaleidoscopic screens.

9. Convert pictures back to DOS II format after adding text to them. You can then print them with your favorite screen dump or use them in a slide show program.

10. Keep your PRINT SHOP formatted disks organized by using commands such as RENAME, DELETE and FORMAT. There is also a directory which will tell you the length of all the files and how much room is left on the DISK. Priced at $25.99

PRINT SHOP COMPANION, Broderbund Software, 17 Paul Drive, San Rafael CA 94903-2101.

According to Broderbund, "... The Print Shop companion is the perfect partner to the PRINT SHOP ... giving you a powerful new set of design tools as well as a wide range of new graphic elements... 12 new fonts and 50 new borders, all ready to use with your original PRINT SHOP, which the companion will update to accept fonts and borders from "other" disks ... You'll have the ability to create original borders and fonts, design sophisticated graphics quickly and easily, generate thousands of unique background tiles, print custom calendars, and create a gallery of zany creatures in almost no time at all. Requires at least 64K and priced at $25.99.

BEACH-HEAD II, Access Software Inc.

BEACH HEAD II - - - - "... A true head-to-head two player, multi-sequence game that allows you to play either with a friend or against the computer in stunning high resolution three dimensional graphics..." The scenario? "... Victory at hand ... the Fortress destroyed, the enemy on the run. Then, a brilliant suicide air attack leaves the allied fleet in a heap of mangled metal at the bottom of the harbor. No longer do you hold the advantage. All that's left of your forces is a squadron of helicopters and several platoons of battle weary infantry. From the mountains nearby, the DICTATOR, known only as The Dragon, is watching and waiting to attack. Feeling the moment is right, he issues the following demand - "Your forces are surrounded and your position is futile. Surrender now or The prisoners will suffer for your stubbornness. The odds are totally against you, but your decision is immediate. Allied forces are poised to proceed inland to rescue their comrades and capture the Dragon once and for all. But whose final battle will it be? His ... or yours? Priced at $29.99.

HARDBALL, Accolade Entertainment Software, 20833 Stevens Creek Blvd., Cupertino, CA 95014

"... The most graphically stunning computer baseball game ever developed! HARDBALL puts you on the field and in the dugout as both player and manager of a baseball team. It'll put you in the big leagues... "

Using three "windows", HARDBALL's main screen gives the gamester a three-dimensional view from behind the pitcher looking towards home plate, while a second window shows an overhead view of the diamond showing the location of base-runners, etc. A third screen shows the players' options and the game's statistical situation. At the crack of the bat, the main screen switches perspective and follows the flight of the ball. "... HARDBALL gives you command of the physical interactions and strategic decisions of baseball. Hit and run. Steal. Sacrifice. Leap for long fly balls or dive for grounders ..." You can test your skill against the computer or your best buddy. Pitching, batting, fielding, etc., all joystick controlled. Priced at $21.99.

ATARIWRITER PLUS PRINTER DRIVERS

by Jack Holtzhauer

Many folks have found that constructing workable printer drivers for use with Atari's popular ATARIWRITER PLUS word processing program is not an easy task. Getting the darn things to work in double-column format has been a particularly vexing problem.

Greg Porter, writing in the June '85 edition of the PACUS report, may have found the solution to many of our double-column formatting problems. For those who are interested, his article is reprinted below, as is Randy McSorley's (also PACUS June '85) driver for a NEC 8023.

Several other user group's newsletters have published drivers for a few of the more popular printers. But wouldn't it be a nifty if we could gather all these drivers together on one disk for distribution to interested users' groups from coast to coast. CURRENT NOTES is willing to undertake this project and local readers and other users' groups are invited to submit drivers for inclusion on a master disk.

The drivers may be submitted in a text format similar to that employed in Greg Porter's article, but with the codes for "user" fonts 1 thru 9 also included. Cooperating individuals and users' groups will receive a free copy of the master disk. Others may order a disk at a cost of $5.00. We'll announce when they're ready for shipment.

Please send submissions to:

Jack Holtzhauer
15817 Vista Drive
Dumfries, Virginia 22026

And while we're at it, why don't we agree on one convention. Let's use Font #1 to turn OFF super/subscripts, italics, double-strike, elite, etc., and to turn ON pica - always using this font as a toggle when changing from one font to another. This system was published by Bill Zinn in the March '85 edition of ABACUS and re-printed in the letters to the editor section of CURRENT NOTES last month.

Greg Porter's Drivers
(Reprinted from PACUS 'June '85)

My previous article on using the printer driver construction features of the ATARIWRITER PLUS word processor will not allow double column printing. The fix for this bug is to substitute the number 155 for 13 in the printer drivers. This occurs when entering the printer code for carriage return (which is ASCII 13 for most printers). The 155 is the ATASCII decimal code for carriage return used by the Atari computers. The decimal code 13 is interpreted by the ATARIWRITER PLUS program as the control code for setting the Second Left Margin for double column printing mode. Apparently, the program can't accept a new Second Left Margin being specified at each carriage return and results in a system crash. The confusion between the 13/155 code is corrected by the printer interface. The interface, when encountering a 155, automatically changes it to a 13 so that a line feed is performed by the printer.

A change has also been made to the Smith-Corona driver which will allow double column printing by printing both columns on one pass versus printing the first column and reverse line feeding, then printing the second column. Reverse line feeds are not recommended on tractor feed systems.

The updated printer drivers are as follows:

FUNCTION	PANASONIC KX-P1080	SMITH-COR D-100	EPSON FX-80
INITIALIZE EVERY LINE	(BLANK)	(BLANK)	(BLANK)
LF and C/R	155	155	155
UNDERLINE OFF	27 45 0	27 45 0	27 45 0
UNDERLINE ON	27 45 1	27 45 1	27 45 1
BACKSPACE	8	8	8
ENLONGATE OFF	27 87 0	27 87 0	27 87 0
ENLONGATE ON	27 87 1	27 87 1	27 87 1
BOLD OFF	27 70	27 70	27 70
BOLD ON	27 69	27 69	27 69
UP 1/2 LINE	(BLANK)	(BLANK)	(BLANK)
DOWN 1/2 LINE	(BLANK)	(BLANK)	(BLANK)
DOWN 1/2 LINE & C/R	(BLANK)	(BLANK)	(BLANK)
RETURN W/O LF	155	155	155
FONT #1 PICA	27 80	27 80	27 80
FONT #2 ELITE	27 77	27 77	27 77
FONT #3 CONDENSED ON	15	15	15
FONT #4 CONDENSED OFF	18	18	18
FONT #5 ITALICS ON	27 52	27 52	27 52
FONT #6 ITALICS OFF	27 53	27 53	27 53
FONT #7 SUPERSCR. ON	27 83 0		27 83 0
FONT #7 PROP. ON	- - -	27 112 1	- - -
FONT #8 SUBSCR. ON	27 83 1	- - - -	27 83 1
FONT #8 PROP. OFF	- - -	27 112 0	- - -
FONT #9 SUB/SUPER OFF	27 84	- - - -	27 84

Randy McSorley's NEC 8023 DRIVER
(Re-printed from PACUS June '85)

INITIALIZE EVERY LINE	(BLANK)
LINE FEED & C/R	155
UNDERLINE OFF	27 89
UNDERLINE ON	27 88
BACKSPACE	(BLANK)
ELONGATE OFF	15
ELONGATE ON	14
BOLD OFF	27 34
BOLD ON	27 33
UP 1/2 LINE	(BLANK)
DOWN 1/2 LINE	(BLANK)
DOWN 1/2 LINE & C/R	(BLANK)
RETURN W/O LINE FEED	(155)
FONT #1 PICA	27 78
FONT #2 CONDENSED	27 81
FONT #3 PROPORTIONAL	27 69
FONT #4 UNDERLINE ON	27 88
FONT #5 UNDERLINE OFF	27 89

Randy uses fonts #4 and #5 for underline on and off so that he can underline strings without breaks between words. Using the normal ATARIWRITER underline, spaces aren't underlined.

ATARI'S SMALL MIRACLES

by Mark A. Brown

Once again welcome to Atari's Small Miracles, the column made for the people in the world who love programming but hate typing. You'll find all sorts of short programs here on all sorts of topics, from the really strange to the practical, from the colorful to the drab.

First off this month I'd like to make an apology and a disclaimer to everybody who reads this column and types in the programs. I got some criticism from somebody saying that my column was too complex. They said that I shouldn't put so many programs in the column that have machine language subroutines and such, because as a beginning BASIC programmer those programs helped him very little in learning. Then another person told me that my column was too simple. I was catering to the beginning user and should put programs of more depth and complexity in. With two conflicting opinions facing me I decided that I must be doing something right because that meant that at least two people were reading this column.

Now for the apology: I'm sorry to everybody who can't understand my programs and to everybody who can't stand my programs. I can't please all of you. Now for the disclaimer: This column is a source of programs ONLY. The strictest definition of this column is a place where short programs are printed on a regular basis. I don't try to educate or enlighten, I simply write programs, explain their purpose (but NOT their inner workings), and let the programs themselves teach. You could interpret that as a learn-by-doing approach, but don't expect to learn from every program, because that in turn would limit the programs I could put in. It boils down to this: Atari's Small Miracles is a source of small programs, not a column for learning how to program or finding new techniques. It's meant for fun.

Now for this month's topic: <u>character sets</u>. The Atari computer (as well as most other home computers) can redefine its character set. This means that the character making up the letter "A" (for example) can be turned into a script letter "A", a space ship, a stupid looking happy face, or whatever you want. The programs this month help you in making these characters and in using them. If you want to really explore character sets, I suggest you look them up in old magazines and books and acquire a professional editor or two (like ElfFont, which can be downloaded from the Armudic BBS under the name FONTEDIT. It's public domain, 100% machine language, powerful, and easy to use. Take those endorsements with a grain of salt; I also wrote it).

TINYFONT

The first program this month is one of the longest stand alone programs this column has ever seen. TinyFont is used to redefine character sets a character at a time. It is pretty useless as presented here but it makes a good program skeleton for a fairly decent program. Add a load/save set command and a way to incorporate the set in programs and there you go. If there is enough demand I'll write the expansions and put them in this column to make the first two part program.

Type in the program, SAVE it and RUN it. Wait a few seconds for the program to set up and you'll soon be presented with the character set (printed at the bottom of the screen), the commands (at the top), and the character editing box in the middle. Move the editing cursor around with the arrow keys (don't use the CONTROL key though), change a pixel in the character by using the space bar and change the character you are editing with the arrow keys (with the CONTROL key). The character you are editing is printed just above the character box in the appropriate space. When choosing a character, find the one you are currently editing in the set and find the one you want to edit. Then move the invisible choosing cursor around with the arrow keys and control key. For example, if you are on the capital letter "S" and you want to edit the lowercase "T", press the down arrow twice and the right arrow once. If all this seems confusing, just take my word for it that it is easier in use than in writing. Have fun with TinyFont!

```
10 GRAPHICS 0:POKE 752,1:? "Setup...":
DIM A$(2048):Z=INT(ADR(A$)/1024)*1024:
Z=Z+1024*(Z<ADR(A$)):FOR A=0 TO 1023
20 POKE Z+A,PEEK(A+256*PEEK(756)):NEXT
 A:POKE 756,Z/256:POKE 82,13:? CHR$(12
5);"   TINYFONT":? "             ";
30 ? :? :? "<Arrows>Choose":? " <+*-=>
 Moves":? " <SPACE>Marks":POSITION 15,
17:? "Edit - ' '":POKE 82,2
40 S=PEEK(88)+256*PEEK(89):FOR B=0 TO
3:FOR A=0 TO 31:POKE S+764+40*B+A,B*32
+A:NEXT A:NEXT B:OPEN #1,4,0,"K"
50 X=1:Y=1:POKE S+703,C:FOR B=1 TO 256
:D=S+255+40*Y+X:E=PEEK(D):POKE D,E+128
:GET #1,B:POKE D,E
60 IF B<32 AND B>27 THEN C=C-(B=30)+(B
=31)-32*(B=28)+32*(B=29):C=C+128*(C<0)
-128*(C>128):GOSUB 90:GOTO 50
70 IF B=32 THEN POKE Z+C*8+Y-1,PEEK(Z+
C*8+Y-1)+((2^(8-X))*(E=0))-((2^(8-X))*
(E<>0)):POKE D,3*(E=0):NEXT B
80 X=X-(B=43)+(B=42):Y=Y-(B=45)+(B=61)
:X=X-8*(X=9)+8*(X=0):Y=Y-8*(Y=9)+8*(Y=
0):NEXT B
90 FOR B=0 TO 7:POSITION 16,B+7:A=PEEK
(Z+8*C+B):D=127:FOR E=1 TO 8:? CHR$(32
+3*(A>D));:A=A-(D+1)*(A>D)
100 D=INT(D/2):NEXT E:NEXT B:RETURN
```

ROTATE

This program simply takes a character that has been previously redefined and rotates it ninety degrees counter-clockwise. "How useless!" I hear you say. ROTATE can be used in a variety of ways, though. For example, it can be added as a command to TINYFONT. You can rotate letters and numbers (as the demo program does) and use it in conjunction with GRTEXT to make the labeling of computer generated graphs and such much easier, and so on. If you can't find any use for it whatsoever, just file it away as a nifty, but useless, trick.

The format to rotate a character is:

```
JUNK=USR(ADR(A$),CHRADDR)
```

where CHRADDR is the memory address of the eight bytes making up the character. Let the demo program provided be your guide as to how to use it.

```
10 C=0:DIM A$(72):FOR A=1 TO 72:READ B
:C=C+A*B:A$(A,A)=CHR$(B):NEXT A:IF C<>
353341 THEN ? "Data error!!!":STOP
20 DATA 04,104,133,213,104,133,212,169
,0,160,7,153,217,0,136,16,250,169,1,13
```

```
3,214,169,7,133,216,164,216,177
30 DATA 12,133,215,160,7,169,128,36,21
5,208,21,74,136,16,248,6,214,198,216,1
6,232,160,7,185,217,0,145,212,136
40 DATA 16,248,96,72,185,217,0,5,214,1
53,217,0,104,208,223
50 REM ***************************
       *                         *
       * Rotate subroutine above *
60 REM *  Sample program below   *
       *                         *
       ***************************
70 ? CHR$(125);"Please wait...":FOR B=
0 TO 3:FOR A=0 TO 31:POKE PEEK(88)+256
*PEEK(89)+40*B+A+404,32*B+A:NEXT A
80 NEXT B:DIM F$(2048):A=INT(ADR(F$)/1
024)*1024:A=A+1024*(A<ADR(F$)):POKE 75
6,A/256:FOR B=0 TO 511
90 POKE A+B,PEEK(57344+B):POKE A+B+512
,PEEK(A+B):NEXT B:FOR B=0 TO 63:JUNK=U
SR(ADR(A$),512+A+8*B):NEXT B
```

GRTEXT

Finally, the most useful program this month. GRTEXT allows you to put text on a graphics screen directly, instead of the old draw-it-on technique. Let the example guide you again, but here is the format:

```
JUNK=USR(ADR(A$),XY,ADR(T$),LEN(T$))
```

where XY is the position on the screen and T$ is the string of characters you want printed. XY can be found by taking the double byte value at 88 [PEEK(88)+256*PEEK(89)] and adding the X value and the Y value times the number of bytes per line. For example, if you want to put text at the screen position 4,140 on a graphics 8 screen, the value would be:

```
PEEK(88)+256*PEEK(89)+4+140*40
```

because the graphics 8 screen has 40 bytes per line. If you're unsure of the number of bytes per line, use either 10, 20, or 40 until one looks right.

Note that although it is possible to have as long a string as you want, if you want it to look good don't put any more characters per line then the number of bytes there are. Also note that for the demonstration provided with the program you need to have an XL or XE computer to fully see every graphics mode.

I hope you find some good uses for GRTEXT, it really has potential. It can label computer generated graphs, it can put text in among a complex graphic picture, and so on. Enjoy it!

```
10 C=0:DIM A$(136):FOR A=1 TO 136:READ
 B:C=C+A*B:A$(A,A)=CHR$(B):NEXT A:IF C
<>1024302 THEN ? "Data error!":STOP
20 DATA 216,24,165,87,105,120,168,177,
212,133,222,104,104,133,213,104,133,21
2,104,133,215,104,133,214,104,104
30 DATA 33,216,198,216,169,0,133,221,1
64,216,177,214,8,41,127,201,96,176,10,
201,32,176,4,105,64,144,2,233,32
40 DATA 0,10,38,221,10,38,221,133,220,
165,2 21,109,244,2,133,221,165,212,24,
101,216,133,218,165,213,105,0,133
50 DATA 19,160,0,177,220,40,8,16,2,73,
255,145,218,165,218,24,101,222,133,218
,165,219,105,0,133,219,200,192
60 DATA 8,144,228,40,198,216,16,167,96
,39,19, 19,9,9,19,19,39,39,39,39,39,39
,39,19,39
70 REM ******************************
       * Program above:sample below *
       ******************************
80 FOR A=3 TO 15:GRAPHICS+16:JUNK=USR(
ADR(A$),PEEK(88)+256*PEEK(89),ADR("* A
tari! *"),10):FOR B=0 TO 99:COLOR B
90 TRAP 100:PLOT 0,10+B:DRAWTO 39-B,10
+B:NEXT B
100 FOR B=1 TO 200:NEXT B:NEXT A:FOR A
=1 TO 500:NEXT A:GOTO 80
```

Atari's Small Miracles is in need of programs. If you have any short programs you are especially proud of, send them to:

Atari's Small Miracles
c/o Mark A. Brown
7097 Game Lord Dr
Springfield, VA 22153

And don't worry if the programs this month are too complex or too simple; I'll get around to your level of programming eventually. See you in the next issue!

SILENT BUTLER
Reviewed by Bill Husztek

What you get: (1) two disks, one write-protected program disk, and a copyable record disk. You will use the second to actually enter your records; (2) a manual.

A user friendly computer, or computer program from my point of view, is simple. "User Friendly " means I can turn it on, and with no prior expertise or experience and get the desired result, IMMEDIATELY. Anything else is not user friendly to whatever extent expertise, experience, or time are required from the user to get the desired result. SILENT BUTLER's packaging is somewhat misleading to the potential purchaser, it seems to promise a comprehensive home bookkeeping program and tax preparation tool. In fact it is limited to several specific aspects of the overall modern home budgeting process. In these areas, it deserves the label, USER FRIENDLY!

SILENT BUTLER handles:

* checking and savings account recording, math, and reconcilliation with institutional statements.
* credit card account records.
* routine bills such as car or house payments.
* necessary updates, and postings to statements, and tax preparation files.
* an appointment, and memory jogging, important event, calendar.

The SILENT BUTLER is divided into two areas of record maintenance. The routine, Bookmark One, and the infrequent, Bookmark Two. You choose where in the program you want to begin, or be with what Atari calls its "Jump Feature". Unless you are involved in doing some task within the program, you can roam about with a stroke of the SELECT key which gives you the overview menu. Each task is numbered 1 through 0 for a total of ten which means a maximum of two keystrokes is necessary to get to work.

Loading is a snap. No need to remember the OPTION key, but if you do its okay. Once on your screen displays the face of a mustacioed man in bowtie against a red background. Don't panic the red isn't significant. Once loaded the program gives two chimes and a new screen with instructions. No confusion here as long as you have the owner's manual.

Documentation, the menus and instructions, is excellent. A small accompanying booklet with the imposing title of Owner's Manual, and 16 pages of well written instructions, plus the Table of Content are clear and understandable. Obviously done by someone fluent in the English language, and familiar with the purpose of tables of content and section heads, this booklet is short, concise and all headings are in "panic level" print. In a state of fatigue, frustration, or panic they allow the user to easily locate the appropriate section and read the directions. If nothing else Atari knows how to write a good set of instructions. They don't always do it, but this product and their early AtariWriter instruction book assure me that they can if they want to.

The little devil is fun by golly. For the novice, or a duffer this program is user interactive. The chimes aren't a bad feature. The program uses a question format to direct you to the various tasks you can do. For instance a typical session begins with SILENT BUTLER asking for today's date. Once you've supplied that, assuming you know, it then presents the following series of questions.

"Since we last spoke have you changed your savings or checking accounts or their locations?"

You respond <Y>/<N>.

"May i be of service to you in correcting or adding to my journal records of any Birthdays, Anniversaries, or Other Dates you would like me to remind you of at an appropriate time?"

<Y>/<N>.

"Since you last called upon me has there been any change in any of your Fixed Bills (ones which are always the same, such as car payments)....?"

<Y>/<N>.

If and when this routine series of questions become tedious, or unnecessary, you can use the program's "Jump Feature" as previously described. It's worth a note here that most commands without exception are instantly responded to. The SILENT BUTLER is quick. But this can be a source of some user confusion. All of the various questions require a moment to read and think before you act. I discovered that since the keyed responses have no sound stimulation, and the screens all appear so much alike, that with the SILENT BUTLER's speed of response you can't let your attention wander. If there is a gripe, that's it.

Compatibility with my Panasonic 1091 printer was no problem, the SILENT BUTLER gives excellent neatly printed lists and reports, and types up a very professional looking check. The manufacturer suggests you purchase one of its "CHECKHOLDER"s which are plastic computer paper with corner slots to handle the standard pocket/purse 6"x2-3/4" form checks. I was able to duplicate the plastic holder with standard computer paper, a penknife, and three minutes of effort.

When the program does any requested act of bill paying, changing a balance, updating a list or calendar it also updates other companion files, so that you don't have to repeat the job.

The SILENT BUTLER is not a spreadsheet. It is not designed to work "What if?" scenarios in any detail. It is a simple work-a-day no gimic program. From that point of view, it isn't worth the money. The SILENT BUTLER can be troublesome on the question of time consumption, since it requires you to read the various screens within a tasking file in order to do the job. The authors might have avoided this problem by numbering each screen so that the impatient user could quickly skip through to the point where they wish to begin. Those are valid complaints, but again for what it does, its good.

How do I rate the SILENT BUTLER. Excellent as long as the user doesn't require a sophisticated comprehensive tax or home budgeting program. In the $19.-$29.99 price range I am seeing it offered at it is a realistic starting program for what it delivers. It is very user friendly, delivers trouble free results in the areas specifically described. I recommend it to 8-bit owners. It's just a shame it wasn't introduced in 1984 when Alan Alda was telling us the Atari is designed "to know we are only human".

MIDI MUSIC SYSTEM

Reviewed by Dee Dee Martin

The best way to describe Lee Actor's MIDI MUSIC SYSTEM (MMS) [Synthetic Software, 189 Duncan St., San Francisco, CA 94110, $69.95] is in one word ... FANTASTIC! This is a powerful musical step editor for playback through a digital synthesizer that is both easy to use and lots of fun.

For those who have used Mr. Actor's Music System or Advanced Music System (AMS) from APEX you are in for a double treat. Not only can you continue to create music and arrange it to please your palate, MMS has a utility program on the second side of the disk that allows you to convert your old AMS files to MMS format! Many plaudits to Mr. Actor for providing this compatibility and saving long hours spent re-editing musical favorites.

Mr. Actor is an accomplished musician now doing commercial game programming. His AMS program was a fine indication of his musical background and again in MMS he has written a program simple enough for children to enjoy yet comprehensive enough to allow advanced musicians to arrange and create complicated musical passages.

This program allows for ties, triplets (of any value) dotted notes, changing of meter or key at any point, automatic retards and accelerandos (tempo up or tempo down), easy repeat techniques, cut and paste, and, with the "jump" command, often used musical phrases can be written in nested loop form.

Music editing is similar to the AMS format of note, incidental, octave, value and the screen format places all voices in view through a highlighted window and scroll process similar to a spreadsheet. Measure marks do not affect the play back and may be placed anywhere on the editing screen for easy reference. This is great for music that begins with an up beat or incomplete measure. Data entry is instant like a word processor and since note values are constant until changed, measures of sixteenth note runs are much faster to enter than with the old AMS. There are 99 voices available for editing. Voices 1-20 are "Channel" Voices and may be assigned to the 16 MIDI channels. Voices 21-99 are "Phrase" voices used for jump and repeat phrases which can be thought of as musical subroutines. There is a transpose command that allows a musical phrase repeated in other voices to be cut and pasted and transposed up or down by half tones or octaves. A RAM memory display is always at the bottom of the editing screen with over 8000 note entry available. With liberal use of jump and repeat commands, memory should present no problems even in long and complicated scores. Music may also be entered from the synthesizer keyboard. Keyboard entry may be toggled on/off. On line help is available for all commands!

The playback screen shows two keyboards and will display up to 12 voices. Play back any or all voices from any measure in the music to any measure. You also may choose which voices to display. By holding down the space bar you may stop the playback at any piont to visually check the color display. This is a great aid in detecting typos in music editing. Stop all playback at any point with ESCAPE.

DOS functions are available through the Main Menu selections. MMS accesses two disk drives though it is not necessary to leave the program in drive one. A caution step is necessary before overwriting existing files. Voices may be saved separately. There is also provision for an information file for saving current midi information. Mr. Actor has provided an information file for the CASIO CZ101 synthesizer.

There are also several demo pieces on the program disk including "Flight of the Bumble Bee" and a great rendition of "In the Mood" which, when played using a brass ensemble sound, is delightful. These demo programs may be loaded and then, through the edit selection of the Main Menu, reviewed as a tutorial for editing techniques such as repeats, jumps, and transposing.

The program is will written and well trapped. After hours of use, our copy has not crashed or locked up once. Buzzers sound when you make editing mistakes and the automatic beat counter has been faultless even in very syncopated rythmns and involved musical passages.

The hardware required to operate MIDI MUSIC SYSTEM is: Atari 400/800 XL or XE, Hybrid Arts Midimate interface and cables, one disk drive, a MIDI-compatible synthesizer (with earphones or amplifier), and joystick (optional).

There are very few additions or corrections that would make this a better program. Mr. Actor has allowed for making a backup copy (I hope you won't abuse the priveiege). The AMS conversion utility is somewhat slow. It was written in Basic and if you have the Basic XL or XE cartridge form OSS you can boot up with that, list the program and then add the "FAST" command, then resave the utility program "D:MTRAN2.BAS". Adding MEM SAVE to your backup copy is also a help. The DOS that Mr. Actor uses is not compatable with DOS 2.0 so you will only have access to 7-- sectors of disk memory. I found this out when I tried to make my backup copy to a disk formatted with DOS 2.5 and RAMDISK.COM on my 130XE. This is a small price to pay for such a great program. Unlike Hybrid Arts Midi Track II, with MIDI MUSIC SYSTEM you may save as many musical pieces to a disk as your disk will hold. Hybrid Arts only allowed one song per disk. That can get expensive!

The manual, by Gary Levenberg, is certainly not flashy. Although the documentation for music editing is thorough and the online Help is more than adequate, those not fully familiar with synthesizer technology and buzz words may have to struggle to reach the full potential of their creativity. To put it another way: the musical editing process is simple and quick to master, but just as one must learn to communicate commands to a printer, so must you learn the full capability of your synthesizer by studying its documentation. It took us several days to figure out how to access the additional 16 voice sounds available through the internal memory of our CASIO. (We found that the preset voice sounds on the CZ101 began with Sound #0 for preset #1 and the internal memory voice munbers began with Sound #32.) We still have not comprehended the "Velocity" functions.

Advanced Music System was one of the most used programs in our library and has served us well. The unlimited sound and voice capability of the synthesizer is a boon to those of us who enjoy creating "musical masterpieces" and Lee Actor's well-written follow-up MIDI MUSIC SYSTEM is a joy! We look forward to Mr. Actor providing us with a print program for hard copy print-outs for our high school band and church choir.

Ms. Martin, a self-employed Specialty Advertising saleswoman, has one son and lives in Lake Placid, Florida. Dee Dee began computing five years ago on an Atari 800 and uses her computer almost daily for bookkeeping, general correspondence, artwork and layouts, and, of course, MUSIC!

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ST UPDATE

by J. Waters & F. Sommers

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Hardware. As of this writing (6/26), the long-awaited hard disk drives have not yet left Atari. Why the delay? Nobody seems to know. The are still expected "shortly." Hopefully, they will be on store shelves by the time you read this. The "blitter chip" has finally passed its tests! (Only four months behind schedule.) Turns out the reason the first few met with dire results was finally traced down to, guess what ... an incompatibility in part numbers between the GE parts list and the Atari parts list! If you put it together right, it works afterall. All participants are moving post haste to get the product out. Blitter chip will be available for the 520s via a daughter board. How about on the 1040s? One party suggests that Atari will simply swap 1040s if you want a new blitter chip but I find that a little hard to imagine. 1200 baud modem ... look for it in July, price around $100. CD-ROM, Laser Printer ... no news.

Mac Emulator. David Small, creator of the MacIntosh emulator for the ST, informs us that he hopes to release the product in about six weeks. Can't use the name "Mac" though. Seems Apple thinks its their trademark. (I wonder what the BiG Mac has to say about that?) However, you'll have to add your own Apple ROMs, available through Apple dealers, to make it work. Should be priced under $100.

Software. New software continues to come out regularly for the ST. Atari showed STAR RAIDERS, MILLIPEDE, BATTLE ZONE, and the CP/M Emulator at CES. The classic SILENT SERVICE will soon be available as will PAINT PRO and TEXT PRO from Abacus. Activision has popped up with MUSIC STUDIO to let you compose and arrange background music for your ST's first aria and N-VISION to give DEGAS a run for its money. MichTron has introduced MAJOR MOTION, action plus in the arcade world with the army's newest all-terrain vehicle, produced at no cost over run. In addition to CORNERMAN, reviewed in this issue, MichTron is also up with TIME BANDIT, a search thru multi-levels of action in search of the treasures of time; BUSINESS TOOLS, flaunting 200 full formats for contracts, business communications, and other commonly used letters; MISSION MOUSE, sporting "graphics unequalled or seen before" on high resolution monochrome screens; and PERSONAL MONEY MANAGER, the answer to never closing an eye on your personal fiances, a detailed and thorough program.

Microsoft WORD on the ST. Reliable observers have stated that they have seen Microsoft WORD running on an ST. Some rumors even say EXCEL has been seen on an ST. Well, now we know that WORD can run on the ST, but the question remains, Will Microsoft release it? After all, GEM and Microsoft WINDOWS are competing programs. I don't know the answer yet, but I can assure Microsoft that a lot of ST owners -- as well as Atari itself -- would be delighted to see WORD on their machines.

ST Software Catalogue. A call or note to Atari Customer Relations (1196 Borregas Ave., Sunnyvale, CA 94086) and $12.45 will net you a 400-page volumne of ST software, with product discriptions and ordering info; half of the 300 programs listed are already on the market, with the rest following now and in the fall. Atari is making efforts to keep its computer fans informed vs well-rumoured. The first issue of the "authoritative" ATARI USER GROUP NEWS appeared last April. We will watch it to see if they can break thru the corporate wall and sort fact and fantasy better than some even here in Washington are able to.

Haba vs Hippo. While on the subject of software, Jerry Humphrey of HABA SYSTEMS has asked me to pass on the word that HABA SYSTEMS and HIPPOPOTAMUS SOFTWARE are two different companies. Too bad HABA released HIPPO C (since recalled) and helped confuse the marketplace. HABA has such programs as HABA CHECK MINDER, HABA MAILROOM, HABA SOLUTIONS (Business Letters and Wills), HABAVIEW and HABAWRITER. HIPPO has released HIPPO DISK UTILITIES (incorrectly referred to as Haba Disk Utilities in this very publication -- Feb. 1986 -- sorry!), HIPPO RAMDISK, HIPPO ALMANAC, HIPPO BACKGAMMON, HIPPO CONCEPT, HIPPO SIMPLE, and HIPPO WORD.

CP/M Emulation. England and London Town have been running "Word Star", "dBase II", BDS C, ZORK, Turbo Pascal, Multiplan, and other goodies, AND ON ST 520's! Locally, we have not been able to find anybody who has ported CP/M software from 5.25" disks over to our ST 3.5" size and then cranked up the emulator and whacked away. By next issue we would expect a more encouraging report. The emulator is here, the CP/M software abounds at Capitol Pro Micro-users (C.P.M.) and the machines are hungery to try their electronic wings.

CN ST Library. Speaking of software, be sure to check out the new disks in the Current Notes ST Library. Quite a few new titles have been added. One of the most important is #15 which now holds the latest updated version of ST WRITER. This entire newsletter, double columns and all, was produced with the new ST WRITER. All (known) bugs have been removed, and quite a few new features added. For example, paragraphs can now be outdented as well as indented and headings can alternate between odd and even pages. Note that it is also possible to use a different font in the heading than that used in the body of your text (as in these pages). Next issue we'll give the full story behind the new ST WRITER as well as a review.

Disk #39, Arcade Demos, has a real working version (0.96) of TIME BANDITS -- a super game -- as well as a working version of JOUST (no sound or scoring however). #40-#42 are new color graphics demos utilizing a wonderful compressing technique that allows us to put over 20 pictures on a single SS disk. Disks include the compression (decompression) program and a slide program that allows you to display the compressed pictures. #40 basically repeats the best pictures from our earlier disks while #41 and #42 contain new pictures. #48 is a monochrome version of the compressed picture disks with the best mono pictures from #24 and #26 as well as some completely new ones.

#43 is a new terminal programs disk while #44 is a complete working demo of ZOOMRACKS. The demo limits you to 20 records on a file but it can read larger files. One such larger file is found on #45 which contains a listing of Atari User Groups in the country. Besides the ZOOMRACKS format, the User Groups data are available in an ASCII file as well as in H&D Base and dBMAN compatible formats. #46 is for those of you trying to master the complexities of GEM programming. It contains all the monthly GEM Questions & Answers provided to developers by John Feagans of Atari. And finally, #47 is the July issue of INSOFT Magazine.

New ST User Groups should note that they are perfectly free, in fact, encouraged, to use the Current Notes ST library to help start their own club libraries. BEFORE the addition of all the latest disks we had over 1,000 programs in the library. New disks are being added all the time.

TINY THRILLERS

From Ed Seward, Alexandria, VA:

SELECTIVE COPYING. The nice touch, being able to black out various files without being forced to pull out a whole block with no gaps for copying was described in the June "CN": black out a file or a group, then place your cursor on a file further along and holding down both [Shift] and [Control], lightly tap [Insert]; do this to as many files as you wish and then draw them to the location you wish to copy them to. Now, a considerable improvement: Hold down [Shift] and then move your mouse among the files you wish to select (blacken), and click the mouse at each stop. Bingo! Six or eight files can be weeded out of several dozen and copied all at once.

H.B. Monroe of Wadesboro, NC reports:

DIFFERENT DRIVES. If your have two different disk drives (SF354 and SF314) you will find quickly that you can not copy disk to disk, unless you format both to SS (single sided). However, you can "rubberband" all the files on one single-sided disk, the SF 354 drive, over to the double-sided SF 314. The reverse, "rubberbanding", from a SF 314 (double-sided) is also possible, if the total of the SF 314 files does not exceed you space available on the single-sided SF 354). Note: Protected copy files can not be backed-up in this way; you must use a special copy program (ST Copy, Compulsive Copier, Pro Copy, or the latest, Copy II ST) to copy the protected disk to a blank back-up disk; this is one for one, disk to disk; no rubberbanding is possible with files on a protected disk, even though certain copy programs have now advanced to double-sided copy duty, e.g. Copy II ST and Pro Copy.

CLOCK CARD. When using the Logikhron Clock Card with programs that demand the entry of time and date, just save the "DESK.ACC" and "CLOCK.RSC" files to the program disk. If the program does not then automatically load the date and time, just press <Return>, when time and date are requested (thus far this has solved the problem with all the programs Monroe has used, and he highly favors using the clock vs typing in the date and time after each boot).

Marylou J. White of Fremont, CA suggests:

ICON NAMES: To change the names of your disk icons, Drive A or Drive B or Trash, for the first two, click on the icon and then drag down the Install Drive from GEM, delete the current name and type in a new one. Once done save the result to desktop on your boot-up disk. For the Trash Can, load the desktop file into a text editor (word processor), change the name and save the file back to disk and then, after loading, save it to desktop again. MaryLou's icons read: Top Drive, Bottom Drive, and File 13.

OPENING FILES: Instead of opening a file by the prescribed way of clicking and then going to the drag down menu and clicking OPEN, a double click on the file or a click and press of <Return> will automatically open the file.

BACKING UP DATA FILES: Backing up files is axiomatic. To back up data files (such as CHECKMINDER), save the file on your data disk when finished, then insert, immediately, your backup disk and save it again. This can avoid awkward "forgets" and save time, e.g. doing it later and having to load the disk and transfer the file.

SETTING TIME AND DATE: Setting the Control Panel T&D function can be accelerated by using the ESC key versus Backspace. Click on the field and press ESC, old data disappears. (As noted earlier, this applies to all Selection Windows).

From Kendall Whitesell, Linthicum, MD:

MORE ON COPYING: If you want to copy files from a window that is not active, most users will move the cursor to that window, click the left mouse button to activitate the window, and then proceed with the copy (or delete) operation. However, there is an easier way. Assume both A and B drives are open and showing on the screen with drive A active. To copy a file from drive B to drive A, move the cursor to drive B. Then, HOLDING DOWN THE RIGHT MOUSE BUTTON, click on the file you want to move and drag it over to drive A. The copy will be accomplished without ever activating drive B.

From Dave Duberman, Mountain View, CA:

ITEM SELECTOR. Here's a directory-related thriller. Suppose an application program presents you with an ITEM SELECTOR box and you want to list all the files on a particular drive. Click on the "Directory" line in the Item Selector and press [Esc] to erase the line. If you want other than drive A, enter the drive letter and a colon, e.g. "B:". Now click on the "Title Bar" at the top of the directory window in the "Item Selector" box. Your drive selection will be padded to "B:*.*" and all the files on the drive will appear as items to select from.

ST BASIC. Did you know that you can pass position and size parameters in the OPENW command? For instance, OPENW 2,30,40,200,100 opens the second windown and puts the upper left corner at X=30, Y=40 with a width of 200 pixels and a height of 100 pixels. This is undocumented, therefore prone to bugs. Never open a window with the upper left corner Y position less than 10.

[ST Ed Note: Early, early response to CN's appeal for hints exploiting your ST or "Tiny Thrillers", as now labeled, is pleasing. One or two we considered not including, until we asked ourselves, "And how long ago did you, yourself, master that one; and can you identify a better one?" It also should be noted that the ST Editor was called by The Editor a night ago and tested on one of the above. He failed. Which one? Continue, please, if you will. We love it.]

ST 5.25" DRIVES, by W. Frank, (from Pikes Peek Atari Computer Enthusiasts, Apr/May '86.

I own and love my 520 ST. I found an easier way to hook up a 5.25" drive to it. Open the 3.5" drive and very, very gently remove the ribbon cable and connectors. Replace the ribbon cable with a 4 or 5 foot long one using the original connectors. As Dave Small showed in November Antic, find pin 6 of the incoming plug. Make a jumper to wire 12 of the ribbon cable past the connection to the 3.5" drive. Set up the 5.25" drive as Dave Small indicated with a 34 pin crimp-on edge connector ($4.95 at Radio Shack. Oddly, Radio Shack no longer carries 34-wire ribbon cable.

Dave Small was not quite correct in saying you cannot format a 40 track drive. I hooked up an MP152 40-track double-sided drive, cutting one trace as Gary Sewell of Dallas ACE had told me. When you format a 40 track drive, the 40th track is formatted 41 times and the ST will think it can put 720k on the disk. As long as you don't try to put more than 340k (39tracks worth) on the disk, no problem is found writing to the disk?

CURRENT NOTES ST LIBRARY

Order disks from CURRENT NOTES, 122 N. Johnson Rd., Sterling, VA 22170. All disks are $4. Add $1 for postage and handling for every 6 disks ordered. New ST Clubs: Feel free to draw on the CURRENT NOTES Library to build your own ST disk library.

#1: MONOCHROME SLIDE SHOW No. 1.
#2: COLOR SLIDE SHOW No. 1.
#3: 4xFORTH DEMO DISK.
#4: ST TERMINAL PROGRAMS No. 1.
#6: COLOR SLIDE SHOW No. 2.
#7: GRAPHICS DEMO PROGRAMS.
#8: SAMPLE "C" PROGRAMS.
#9: SAMPLE LOGO PROGRAMS.
#10:MIDI DEMO SONGS.
#11:RAMDISKS & ONE MEG DOCS.
#12:DOODLE WITH C SOURCE CODE.
#13:COLOR SLIDE SHOW NO. 3.
#14:ATARI'S NEOCHROME PAINT PROGRAM.

#15:ATARI'S New Enhanced ST WRITER.

#16:COLOR SLIDE SHOW No. 4.
#17:COLOR SLIDE SHOW No. 5.
#18:ST UTILITY PROGRAMS No. 1.
#19:XLISP - object oriented language.
#20:COLOR/MONO SLIDE SHOW.

#21:ST GAME DISK No. 1.

#22:SAMPLE BASIC PROGRAMS.

#23:INSOFT MAGAZINE, JAN. 1986.

#24:MONOCHROME SLIDE SHOW No. 2.

#25:DEGAS UTILITY DISK.

#26:MONOCHROME SLIDE SHOW No. 3.

#27:dBMAN DEMO DISK.

#28:dBMAN TUTORIAL and MAILING LIST.

#29:MICROEMACS. The MicroEMACS editor program. Disks includes this powerful editor, reference manual, and command summary files.

#30:UTILITY DISK #2. Includes an assembler, another command processor, disk copiers, FORTH-83, PrintDIR and TimeDate, disk labels, set display colors, convert pictures, squeeze/unsqueeze files, and change volume.

#31:PASCAL & MODULA-2. PASCAL: (OSS files as of 4/18/86, and 8 demo programs). MODULA2: (source code for Modula-2 GEM DEMO, files for BIOS and XBIOS functions, the VT52 emulator escapes and 11 MODULA-2 files not yet tested on the ST)

#32:Sound and Graphics Demos. planok.prg, sound.prg, zarath.prg, digitize, swimming goldfish, Mickey Mouse head as pointer, Star Raiders demo, popcorn.prg.

#33:Sample C Programs No. 2. cc, digit, fixed, debug, gio, pl3con, printdir, ramfree, sound, ttool, vdisamp, windtst and more...

#34:Music on Your ST. Preview of the ST MUSIC BOX coming from XLent and Deluxe Piano Player -- a super public domain Musical Toy.

#35:Atari ST Demo Disk. This demo highlights the key features of the Atari ST and its peripherals. Produced by Audio Lite, it shows off the Atari's sound and graphics capabilities.

#36:Desk Accessories. Almost two dozen different desk accesories including a TI-59 calculator, calendar, ramdisk, free ram, screen snapshot, background colors, sector editor, games and more. Disk includes John DeMar's ST Tips.

#37:Game Disk No. 2 BASIC Games (Scratch, Switchbox, Bomber), Celestial Caesars, Score4, Battleship, BlackJack, Mad Libs, Maze Maker, and more.

#38:INSOFT MAGAZINE, Jun. 1986. (Latest Atari News, C source code for grep function, dump DEGAS file to Gemini 10x, address & mailing list program and more...)

#39:ARCADE DEMOS Working demos of TIME BANDITS, JOUST, and CRACKED.

#40:TINY COLOR SLIDES No. 1 A disk filled with compressed color pictures, including a slide show program as well as programs to compress and uncompress the pictures. This disk most of the pictures on disks #2, #6, #13.

#41:TINY COLOR SLIDES No. 2 Similar to 40. Holds 28 pictures including the winning entries in the ANTIC contest.

#42:TINY COLOR SLIDES No. 3 Similar to 40. Holds 28 new, exciting, DEGAS and NEO compatible pictures.

#43:TERMINAL PROGRAMS No. 2 22 files including three compiled terminal programs and one terminal emulator (not compiled). Also includes the latest patches to the FLASH terminal program.

#44:ZOOMRACKS DEMO DISK Complete working copy of Zoomracks (limited to 20 record file). Can be used, however, to read and manipulate Zoomracks databases of any size.

#45:ATARI USER GROUPS A complete directory of Atari User Groups in ASCII file as well as in a Zoomracks and H&D Base/dBMAN format. Use #44 to view the Zoomracks database.

#46:DEVELOPERS Q&A Complete listing the of the questions and answers provided by John Fegans to new GEM programers. A great asset for anyone trying to master GEM programming.

#47:INSOFT MAGAZINE, July 1986. Atari news, MIDI report, C source programs for 3D program, caser (converts upper to lower case), and the grep function. PD programs include xmodem terminal program, address and mailing list, and megaroids.

#48:TINY MONOCHROME SLIDES No. 1 A single disk containing the best pictures from #24 and #26 as well as some completely new monochrome delights. Includes files to compress and decompress files as well as show pictures while in their compressed formats.

WINNIE THE POOH IN THE HUNDRED ACRE WOOD

Reviewed by William N. Moes

There's a charming world of imaginative animals, pleasant friends, and quiet whimsey in a visit with Winnie the Pooh. We remember from the stories we read or those read to us. Or perhaps we saw the Disney animations. And now the opportunity exists to visit The Hundred Acre Wood, the home of Pooh and friends, in a graphics text adventure from Sierra for the Atari ST.

It began more than 60 years ago, in 1924, with the publication of a collection of poems by the English author, A. A. Milne. Three other books were published over the following four years, poems and short stories centering on Milne's son, Christopher Robin, and the boy's eight animal toys.

In 1966 the Disney animation, "Winnie The Pooh and the Honey Tree," was released. "The Blustery Day" followed three years later.

Today, all over the world the goodnatured rolly bear and his inexorable appetite for honey are known. We know Eeyore, a donkey full of rainclouds punctured with friendship. And Owl, wise and helpful. Kanga and Roo model as mother and child, understanding and typical of our dreams.

And the others: Christopher Robin, the only person in the world of enchantment and accepting the magic he visits. Tigger, the wonderfully exuberant Tigger, full of mischief and bounce. Rabbit. And Piglet.

But is it possible for this collecption of friends built on the whispy dreams of childhood to survive a pixelled translation?

It's possible.

Development of map, reading, and logical thinking skills are goals of this adventure targeted for children seven years or older. Using either the mouse or single-key input to select from clearly limited choices, the player's goal is to find and return 10 objects to the proper inhabitants or places in The Wood.

Only one object may be carried at a time and only one may be found at any particular location. More than one item, however, may be returned to a single character. If you are carrying something and find another object you'd prefer to carry, first find an empty location, drop what you have, and then return to pick up the other. Seems a touch cumbersome.

Each time the game is restarted these objects may differ. This should greatly add to the program's life-span as children may enjoy the opportunity to replay a familiar game knowing that varied adventures await.

Not sure who needs what you're carrying? You do remember the sound of an owl, don't you? So a visit to Owl replaces the hint books.

A game may be saved to the program disk, although a second save will erase the first.

While it would not be appropriate for evil to exist in this type of game, a little of the unexpected is there to offer extra challenge. You may suddenly find youself wandering in The Mist and in a new location when it lifts. Of course Tigger is around, too, eager to bounce you somewhere else in The Wood. Or The Blustery Wind may appear to scatter any objects you've not returned. There are times when it may seem a bit difficult to even find all 10 objects until after The Blustery Wind has blown. I guess, as the saying goes, it's an ill wind that ....

The music includes the catchy Disney tunes for Pooh and Tigger played at appropriate spots during the adventure and some ordinary but helpful sound effects at other times.

Included with the copy-protected disk is a single-color 12" X 20" map of The Wood and a 20-page booklet of instructions, background, and suggestions for related activities. A separate page of ST-specific instructions is also included. The disk is loaded by clicking on the icon; it does not auto-load. The graphics on the ST game are a step above those found on the packaging, having bright and vibrant hues instead of the duller colors and pattern fills. Generally, from six to twelve colors are used in the fast-loading low-res graphics screens. Artistic detail and subtlety are not in evidence but the pictures, expressly bright and bold, have earned quite favorable comments from my children and their friends playing the game.

While the concept and vocabulary of the program are aimed at those in second/third/fourth grades, younger children will enjoy the program if they have help and older children might enjoy it if there's no one else around. Even some of us who quite seldom pretend to be children still enjoy Pooh and friends.

"Winnie the Pooh in The Hundred Acre Wood" possesses the ingredients of a winner. What it lacks in crafty and stylish sophistication it makes up in showcasing the captivating charm of Milne's characters in an enjoyable introductory graphics adventure. And at $24.95 it's a clear value.

Welcome to the ST, Pooh-Bear!

William N. Moes is a dedicated educator, teaching English to 6th graders in Defiance, Ohio.

CLASSIFIED ADS

HAPPY revision 7 enhancements for Atari 810/1050 disk drives. New $125 ppd. Contact Bill Austin (304-263-1867) for details.

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FOR SALE: (1) ST SF354 disk drive, perfect condition. Have purchased SF 314 drive to use. (2) "Final Word" word processor by Mark of the Unicorn, never used, too complicated for me. No reasonable cash offer refused for either. May trade. Call 704-694-3084 or write H. B. Monroe, 422 Lee Ave., Wadesboro, NC 28170.

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WANTED: A basic program that permits the ATARI CX85 number pad to be used without 'The Bookeeper' as just a simple calculator. Georgia (703) 938-4829.

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Atari 1010 Program Recorder For Sale. Mint condition, still in box. Also included are 3 game cassettes in original boxes with instructions. $25 plus $2 postage. Write: Karl Baker, Center Point, IN 47840.

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NEW for the ST . . . from MichTron

CORNERMAN $49.95

What Sidekick did for the IBM, *Cornerman* does better for your Atari ST! This utility gives you a host of useful desk-top tools in one simple, neat package. With everything from a built in clock to a full function calculator, a cluttered desk is a thing of the past. And as a Desktop Accessory, *Cornerman* is a available nearly anywhere within GEM.

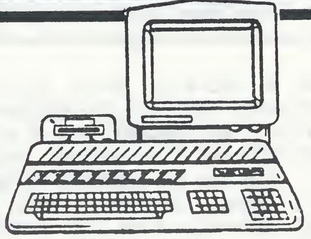
- **REAL-TIME CLOCK** in digital or analog form.
- **NOTEPAD** lets you write and store notes for handy future reference and reminders.
- **ASCII TABLE** shows the ST's symbols with their decimal & hex values. Great for programmers!
- **PHONE BOOK** stores all your important names & numbers, dials through your modem and even records elapsed calling time!
- **16 DIGIT CALCULATOR:** works in binary, octal, decimal, and hex; 3 memory registers; math and logic functions; base conversions; "tape" printer output.
- **DOS WINDOW** for easy access to MichTron's Dos Shell program.
- **15-SQUARES GAME** simply for entertainment.
- Doesn't interfere with other programs.

MICHTRON UTILITIES $59.95

What would a utility be worth that could turn back time and end frustration? Before you find out the hard way that such a utility would be priceless, prepare yourself with *MichTron Utilities*. This utility searches for and retrieves deleted files and lost data. It also lets you change file contents, attributes, file and volume names, or any individual bytes on disk! Just enter replacement data or click on selector buttons. You can format individual disk tracks and copy individual sectors to repair damaged disks. A new 10 sector format utility lets you add 80K of storage capacity to you disks.

Personal Money Manager $49.95

This personal accountant will keep accurate totals for as many expenses, income sources and accounts as you need. Print checks and other kinds of reports for a true picture of your current financial status. You can form projected budgets for future expenses and income. Fast and powerful, the Money Manager uses the GEM system for simplicity.



UTILITIES:

THE ANIMATOR ($39.95) - Animate Neo or Degas pictures for business presentations, or just for fun.

BBS ($49.95) - Complete Bulletin Board System

BUSINESS TOOLS ($49.95) - Over 200 attorney-prepared business forms, letters, and contracts.

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THE GRAPHIC ARTIST

Reviewed by John Antoniades

When a powerful new computer, whether personal, mini, or mainframe, invades the computer market, it naturally takes a long time for programmers to utilize its full power. IBM-PC owners know this very well, since it took several years for reasonable programs to appear. However the rise in popularity of personal computers has attracted many talented programmers to microcomputer software developement, progressively shrinking the time it takes for professional software to be developed for a new popular personal computer.

The ATARI ST is such a computer. Since it uses the GEM as its operating system, the appearance of the Macintosh and of the GEM for the IBM-PC and its clones have laid the groundwork for very fast software develepoment. Early high quality software were either direct ports or clones of IBM-PC software packages, except for the early game programs. The GRAPHIC ARTIST is one of the first programs that tries to take advantage of the tremendous power of the ST. The superior speed and large memory capacity of the ST allows programmers to attempt to implement applications that would be very akward and difficult on other PC's. Enough editorial comments.

So what is the GRAPHIC ARTIST? It is a CAD program integrated with a spreadsheet and a desktop publishing system. The CAD part of it simulates the functionality of the well known AUTO-CAD program for the IBM-PC family. The spreadsheet is not exactly intended to replace LOTUS 123, but it is quite functional and provides an incredibly powerful graphics modeling tool as I will discuss later.

The desktop publishing part allows the user to perform many functions:

1. Use of multiple supplied or user defined fonts on a single document. (A font editor is provided with the program)
2. Integration of text and graphics in a document.
3. Drivers not only for dot matrix printers, but also for laser printers and HP plotters.

It is quite difficult to describe all the features of this program in a review unless half of the issue is dedicated to it. I will try however to sketch as many of the important (in my opinion, of course) features provided. The difference between integrated software packages (MULTIMATE, FRAMEWORK, etc.) and the GRAPHIC ARTIST is that the integrated packages consist of independent entities capable of working on common files. The GRAPHIC ARTIST is a single environment where all functions are active simultaneously during the work session. However I will talk about different aspects of the program in an attempt to summarize its functionality: the CAD part, the spreadsheet and the word processing facilities.

The CAD environment

The first group of operations offered by the GRAPHIC ARTIST are the ones associated with the CAD environment. As discussed in a previous review of a similar program (EASY-DRAW, CURRENT NOTES, May 1986) CADs are object oriented programs. This means that each picture is composed of one or more simple graphic shapes (objects). Objects can be overlayed at will, without loss of the hidden parts. Also the detail of the final print is not limited by the screen resolution, but by the printer and the printer driver programs.

The GRAPHIC ARTIST allows the user to define the units to be used in the work area (WORLD). So the user can draw using the true sizes of the objects and does not need to worry about the scale factor. After all computers are very good in division! In addition a variable spacing grid can be overlayed on the screen to assist the user to align objects with greater ease. Unfortunately, in the first program release it is possible to draw outside the defined world coordinates, a problem that is supposed to be corrected in the upcoming upgrade (late summer). A snap feature with variable spacing is provided to further assist in the alignment of the objects as they are drawn.

The primitive drawing objects are:

1. Points (Drawn as single dots only. If a point marker is desired, a symbol has to be generated and placed on drawing with the place command. More detail on this later)
2. One or more continuous lines with different line styles. (Note: There is no user defined linestyle, or an option for line thickness)
3. Circles and circular arcs. (There are no ellipses or elliptical arcs)
4. Filled rectangles and circular pie slices.
5. Seedfill of enclosed areas. (The available fill patterns are not the ones GEM users are accustomed to, but 10 patterns built into the program. There in no user defined pattern.)
6. Drawing annotation with multiple fonts and different attributes (italics with variable slant, horizontal and vertical variable bold and underline), rotated at any angle and scaled to any size.

The CAD designs are separated into two categories: drawings and symbols. Symbols are named pictures (that may include text) which can be scaled, rotated about a selected point or can be combined with other symbols to generate new symbols or drawings. A drawing is a named collection of graphic primitives, text and symbols which can be saved as an independent entity and can be combined with other drawings. Editing facilities for symbol, drawing and text generation, storage, renaming, modification and merging are provided as main menu selections, along with directives for scaling, rotation, cutting and pasting. Symbols can be nested up to 127 levels deep.

The zooming and panning facilities of the program are excellent. The input to these menu options can be supplied with the keyboard or the mouse for maximum user convenience. The redraw command allows screen repainting, because it does not happen automatically, since in a complex drawing it takes an appreciable amount of time (typically several minutes), and it is better to make all the changes before activating a redraw.

Another important feature of CADs implemented in the program is the concept of layers. Each drawing or symbol can be composed of several designs drawn on transparencies that can be overlayed. Each layer can be assigned a different color so that multicolor drawings can be easily produced. If a graphics plotter is used as the output device, the color index can correspond to a different pen, so that either colorful plots or plots with different width lines can be generated, depending on what kind of pens are loaded on the plotter pen carousel.

Layers can be deactivated because too many lines can often confuse the issue. Multilayer designs can be used to produce very effective and colorful presentation graphics and slides.

So are there any problems? Well..., yes. The world command does not exactly work as one would assume. First of all, the border of the world does not show up, when the display contains an area larger than the world (for example when you have a square world on a rectangular screen). Also if you try to create a printfile, the chunk of the drawing for printing is not completely specified by the user, since the program automatically creates an area that fills the screen. So if you are trying to print an 8.5x11 page, tough luck. Your output does not fill an 8.5x11 dot matrix printer page. Please, we need this fixed, otherwise what desktop publishing? And by the way, please don't allow us to draw outside of our world!

In addition to circles, we could use ellipses and rectangles with rounded corners. Shadows? A reflection of objects would be nice. Why draw the same thing twice? Vertical labels for graphs are customary, so maybe this can come soon. Like EASY-DRAW it would be nice to be able to make a closed object non transparent, so we can cover hidden lines. An autodimensioning toolkit will help users immensely, and I was told that one is on its way, Great! Finally an autojoin of lines and arcs with splines and a line breaking feature are also on the way. Watch out AUTO-CAD! A sizing feature, ala EASY-DRAW is already there, but where is the stretching? And for one last wish, a command to reproduce a symbol on a given bolt circle m times in regular intervals, or on an MxN array would really cut down on effort and spreadsheet computation. This of course is the first release of the program, an a good one, but wish lists are unavoidable.

The Spreadsheet

The GRAPHIC ARTIST contains a 500 x 500 cell spreadsheet. However its purpose is not to relieve the buyer from the services of LOTUS, VISICALC, MULTIPLAN and clones. The spreadsheet holds information usually stored in other spreadsheets, but in addition it holds all the commands and data required to produce graphics and text displays and graphs or charts. This is exactly the feature that makes this program so powerful and superior to most existing CADs.

The fundamental operations of a spreadsheet are mostly present. So one can put values, text or formulae in the cells, can copy, move, insert, delete or blank cells and can recalculate the values in the cells. However, since the same cells can hold graphic information, the designs can be altered by editing of the appropriate cells, or sizes and positions of graphic objects can be altered automatically with spreadsheet recalculation. This makes this program an extremely powerful modeling tool. The available functions for the formulae are not complete, since only addition, subtraction,multiplication, division, averaging, minimum,maximum, sine and cosine are implemented (exponentials and/or logarithms would make a lot more functions available).

Another innovative feature is the ability to display both drawing and spreadsheet simultaneously. The user is asked how many of the screen quadrants should the spreadsheet occupy when it is displayed. Autoscrolling of the spreadsheet can also be turned on, to allow the user to observe the graphic command insertion in the spreadsheet while a design is generated. Finally spreadsheet cells can be named to allow easy reference in the formulae that make use of them.

A very useful set of facilities is provided to allow generation of bar, line and pie charts from spreadsheet entries and the creation of symbols from these charts for insertion in future drawings or symbols. This creates an excellent facility for text and graphics integration. Naturally, these graphs can be enhanced with titles, data identifiers etc. as in other spreadsheet-business graphics packages.

Another clever idea used by the program is the use of disk space as virtual memory, so that the size of a drawing is usually limited by disk space and not computer memory, which will be at a premium in a 520ST. Virtual memory means that when the memory is filled up additional information is stored on the disk. This can slow down the program execution when it happens, so that two commands SOURCE and OVERLAY are provided to allow the user to manage the spreadsheet storage and thus the memory allocation. They allow the user to designate a specific column to be used for graphic input storage, so that designs or symbols that are no longer used can be overwritten conserving physical computer memory.

The main problem with the spreadsheet is its speed. It frequently takes several seconds to scroll an invisible row or column into the visible area of the sheet. Also in the copy operation a range can only be copied into another range of cells of the same shape. So if one desires to copy a single cell into a range of cells, a rather lengthy process is required. The documentation of the format of the formulae is poor and it may take a few tries to get a formula to do what it is intended to do. Since the program allows macros, a facility for macro generation from a range of spreadsheet cells would be very nice. The use of the spreadsheet for graphics storage and modification is by far the hardest part of the program to become familiar with. However, when this happens the benefits and flexibility will definitely be worth the trouble.

The Text Processor

The GRAPHIC ARTIST provides a set of text processing facilities. There are three different commands that manipulate text. The ANNOTATE command allows the insertion of a single line of text into a design. The ALPHA command is used to insert unformatted text in a spreadsheet cell, much like the label in an ordinary spreadsheet. the most powerful of the text commands is TEXT. This allows the insertion of formatted text into a drawing. This command activates a basic word processor with the ability to imbed within the text commands that can change fonts, character attributes (underline, bold, italics) and angle of rotation of a text block. Since the formatted text is stored in a series of consecutive spreadsheet cells, text blocks can be moved or copied using the spreadsheet cell copy and move commands.

Other Features

There are several other features to the program. The use of macros is one of them. Macros allow the user to save frequently used sequences of commands and assign a unique name to each set. The whole sequence can then be reexecuted by activating the DO command and typing the name of the macro. The two commands MRECORD and MEND allow the definition of macros. If a macro named auto is found on the disk containing the program, it is automatically executed on startup, much like the auto folder on a boot disk.

There are several types of files produced by the program. They include drawings, symbols, macros and worksessions. The first three are already discussed. The worksession file contains the entire spreadsheet and the currently displayed drawing. The spreadsheet may actually contain several drawings, symbols, values and labels, so that saving a worksheet is a much larger operation than the other three.

A graphics command language named FIG-GAL is promised by the Progressive Computer Associates (PCA), the company that developed this program. The language will provide structured constructs, such as IF-THEN-ELSE, along with conditionals to allow description of complex drawings.

Output Device Support

A large number of output devices is supported by the GRAPHIC ARTIST. Epson compatible printers are supported. Drawings can be produced in various resolutions. The horizontal printing is done in double od quad density and the vertical printing is done in single or triple density. The highest resolution output is quite impressive, but you must be prepared to wait quite a few minutes for it. This is not strictly the program's fault since very intensive computation and multiple passes by the printhead are required. However this is the first ST program to use the printer to its highest resolution and the results are extremely impressive. If you don't have an EPSON compatible printer, do not despair. The GRAPHIC ARTIST comes complete with a printer driver editor which takes the mystery out of printer drivers. PCA, thank you very, very much.

Another set of printer drivers, complete with its own driver editor is provided for vector devices, specifically HP plotters. Finally the third set of drivers deals with HP laser printers, also with four different resolution outputs.

A problem with the dot matrix printer driver, which is the only one I had a change to use so far, is that the driver does not recognize white space, resulting in a lengthly and tedious printing process. Also, in the laser printer front, currently there are no native language translators (postscript for the Apple Laser, Impress for the Imagen printers, etc.) which would result in very high speed output. If the capability for production of device independent graphics files, such as the ones produced by Donald Knuth's TEX phototypesetting system, extremely high quality, high speed output could be produced by the lucky owners of such devices.

Last but not least, the GRAPHIC ARTIST provides a very powerful font editor, which allows the production of user fonts. If the number of DEGAS fonts produced by the users is any indication, good things will happen in the future. The individual letters are not bit mapped, as in the case of DEGAS, but are composed of a series of lines and arcs. This allows the program to generate fonts of any size that can be arbitrarily rotated.

Well, Do I Need This Program?

Indeed, this is the $64 question. The program carries a list price of $495.00, with an additional $200 for the FIG-GAL language. Steep, eh? Well yes! but look what it competes with. No, no, it is not EASY-DRAW! it is things like Auto-CAD, which cost a mere $2500.00, and it does not have anywhere near the features of the artist. But Auto-CAD is more finished, has a few convenient features and thousands of users. But for its price you could buy a 1040ST, the GRAPHIC ARTIST and almost all of the remainig software in the market for the ST series. But what about the cheap AUTO-CAD clones, ala PRO-DESIGN II? That's where the desktop publishing, device drivers and their editors and the font designer come into play. Try producing fancy slides and text on the pure CADs!

The GRAPHIC ARTIST can indeed produce professional drawings, not available through EASY-DRAW, as well it should for triple the price. It tries however to be all things to all people. This means that it natural that there will be enourmous user wish lists for more features. The current package is fairly complete and definitely quite usable. If its creators continue to improve, enlarge and support it, they have a chance to create a product that other CAD and desktop publishing system users will look up to. As a desktop publishing system, it can certainly produce excellent documents, but it is quite slow. To be fair, so is TEX on the IBM-PC and the MAC. The nature of the beast is such that a page of graphic text requires an unbelievable amount of processing. Also some corrections to the WORLD command would certainly help, so that an 8.5x11 inch page, comes out as full page when printed.

In any case, this is quite an impressive product. So if you want professional looking designs now, this is it! Otherwise you may have to wait for Migraph's edition.

Dr. Antoniades is a physcist currently working at the Plasma Fusion Research Laboratory at the Universtiy of Maryland. John has been working with and writing computer graphics programs for the past fifteen years. John has the luxury of having a 520ST at home and at the same time a 1040ST on his desk at work.

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THE MIDI BEAT

by Mike Lehr

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NEW MUSICAL POSSIBILITIES FOR ATARI OWNERS -- MIDI

This article begins a regular service to CURRENT NOTES readers who are interested in creating computer-assisted music. This month we'll discuss the Musical Instrument Digital Interface (MIDI), a recent development that opens amazing musical possibilities for ATARI owners.

These possibilities are not for musicians only! You needn't be a traditional musician to program lovely music, just as you needn't be a printer to typeset a document with the proper software. We'll see how you can use your ATARI to compose, arrange and perform computer assisted music, and to develop software for other musicians who may be less computer-oriented than yourself.

An extremely powerful approach available to computer-assisted musicians today is through the use of personal computers to organize and control other electronic musical instruments. Organization and control of sound are often the only contribution an artist makes. For example, a piano player controls the piano, but tone production is done entirely by the piano itself.

Your computer is admirably suited to controlling other musical instruments because it can store and organize complex sequences of musical commands and then replay the commands at precise times. A pianist spends years developing the rapid, reliable, feather touch which is the hallmark of an artist. However, the pianist has yet to be born who can issue commands as rapidly, reliably and precisely as a properly programmed computer.

The Musical Instrument Digital Interface (MIDI) is a set of standards for linking and controlling electronic musical instruments which has become widely accepted by the music industry. What MIDI does for you as an ATARI owner is to place at your disposal a vast array of compatible synthesizers, organs, pianos, guitars, drum machines, and special effects devices.

The MIDI standard can be divided into two parts. One part concerns transmission rules and hardware (cables and jacks) for passing data among different MIDI instruments. The second part establishes a common language of digital commands that are understood by MIDI-compatible instruments.

The ATARI 520ST and 1040ST are factory equipped with MIDI-in and MIDI-out ports, and MIDI adapters are marketed for the 8-bit ATARIs. The ports are multi-channel serial ports operating at 31,250 BAUD. However, many musicians are content to think of MIDI ports as input/output jacks that carry information for different instruments (up to 16) over the same cable, and that carry the information so quickly that the instruments appear to the human ear to be keeping perfect time.

The MIDI language standard is at least as important to computer musicians as the linking specification because the language standard permits the development of fairly general software packages. These packages translate user friendly input into musically arranged sequences of MIDI commands and, upon request, cause the commands to be issued at the proper times. Sequences of commands issued by a MIDI package will generally play well on a wide variety of MIDI instruments, because the instruments speak the same language.

In varying degrees, the packages allow files of MIDI commands to be edited, cataloged and merged, thus allowing musical variations to be tested, revised and combined. Input and screen displays in standard musical notation frequently are supported options, and drivers for printing results in musical form are often available. Packages also offer varying abilities to record and display real-time input from MIDI instruments.

However, it is very important to remember that not all MIDI software and hardware is 100 percent compatible, even though MIDI software is fairly general. For example, you can play a note softly or loudly on an accoustic piano, whereas an organ key only turns a note on or off. Likewise, a MIDI compatible electric piano will respond to the MIDI command to play a note softly, but a MIDI electric organ will play the requested note at a default volume and will ignore the "softly" part of the command. Similarly, software written for organ-style instruments may automatically assign a default volume to every note, and a MIDI electric piano would be severely limited by such software.

There are other hardware and software limitations of importance to musicians, and the intelligent selection of MIDI products requires a knowledge of the MIDI standard. We will devote at least one entire article to discussing details of the MIDI standard that relate to major purchase considerations. Limitations notwithstanding however, let's discuss some new musical possibilities which the MIDI standard brings within your reach.

The number of programmer-composers seems definitely to be growing, based on the increasing availability of MIDI products to support computer assisted composition. Fast fingers are not necessary, although musical imagination and background help. You can also have a lot of fun programming creative, personal arrangements of other people's compositions. You can often program melody, harmony and bass lines on a single instrument, because many MIDI instruments are polyphonic: like a piano, they can play several notes at once.

One of the most interesting facets of programming MIDI instruments arises because of the broad range of sound textures that MIDI instruments can produce. Many synthesizers can produce thousands of distinct sounds, some of which mimic accoustic instruments remarkably well, and others of which are completely new sounds. Some instruments, called multitimbral synthesizers, can generate several sound textures at the same time. Moreover, many instruments will respond to a wider range of commands from your computer than from their own keyboards. Consequently, whether you program original material or arrangements, you can color the sound in a very personal way.

There is another side to the "tone color" coin that you may wish to take advantage of: sequences programmed to exploit the features and tone colors of the programmer's instrument(s) often play well on other MIDI instruments or are readily adaptable. Consequently, you may be able to market your compositions on diskettes, and a great deal of public domain music is available for arranging. In addition, you can arrange proprietary music for your personal use and satisfaction.

There are also diverse applications for programmed accompaniments instead of completely self-contained works. One reason for the popularity of programmed accompaniments is that a polyphonic or multitimbral instrument can be programmed to sound like a fairly substantial backup group. In fact, such an instrument can be programmed to sound like a diverse assortment of substantial backup groups.

ar increasingly contains preprogrammed material, and that MIDI programmers enjoy an enormous advantage in a modern multitrack recording environment. In multitrack recording, different voices and instruments are recorded on different tapes or sections of tape, called tracks. Tracks are often recorded at different times and are eventually synchronized and merged.

MIDI software frequently permits the independent editing and merging of tracks, which are treated as related files or as sections of a file. For this reason, appropriate MIDI software is a powerful tool for composing, organizing and producing complex music, and MIDI packages are sometimes referred to as tapeless multitrack studios.

Preprogrammed MIDI accompaniments are becoming increasingly popular for several other reasons. Bugs can be worked out in advance, so fewer takes are required, and proposed arrangements can even be transmitted by modem for advanced review and comment. All this tends to reduce studio time, which is extremely expensive. Finally, the same MIDI instrument can be reused with very different sound textures on separate tracks of a multitrack recording.

Many outlets smaller in scale than a recording studio are available to play programmed accompaniments. Solo musicians, such as guitarists and pianists, often use drum machines or keyboard synthesizers to increase the range of sound they can produce. With MIDI keyboards and drums, you can preprogram whatever you like. This leaves your fingers free for other things, such as playing another instrument or entering additional real-time commands to your MIDI instruments.

Are you concerned about carrying your ATARI wherever you play? Well don't be. You can download your programs to a very portable product called a sequencer, which records MIDI instructions on diskettes for eventual replay. Many sequencers do not need to be completely preprogrammed, but can be made to step through a program in response to some sort of real-time input. This can be very valuable in live performances.

Depending on your temperment, you might be a valuable sideman (sideperson), or you might back your own self. If you're an entertainer by nature, you could even be a "Digital DJ", providing distinctive arrangements of popular tunes or of specialty music that is hard to find on disk.

Whether you compose, arrange, record, or perform, the ATARI/MIDI combination provides you with unprecedented speed, organization and range of tone colors. These tools give the imaginative programmer creative abilities comparable to those of an imaginative instrumentalist, and should translate into added enjoyment for even moderately interested "closet" musicians. Since you've read this entire article, you're probably at least moderately interested. So enjoy whatever music you make, and as the song says, we'll see you in September.

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PHILON FAST/BASIC-M COMPILER FOR THE 520ST

Reviewed by Stephen Eitelman

Introduction and Major Conclusions. ST Basic supplied with the 520ST is an interpreted language. This means two things. First, in order to run a program, ST Basic must be loaded into the machine, then the particular program loaded and run. Second, as each Basic statement is encountered, the interpreter must locate the machine language code in its library and execute it. The advantage of this arrangement is the ease of interactive editing both during entry of the code and during program execution. The major disadvantage is lack of speed for long loops, because each command is translated each and every time through the loop. Another disadvantage is the inability to run an application directly from the GEM desktop - ST Basic must be loaded first.

Philon has created a compiled Basic for the 520ST. A compiled Basic translates the entire program into executable machine code and stores this on disk. The program thus does not consume any time translating individual commands into machine language during execution of the program. In principle, programs that are very long and/or contain lengthy loops can be speeded up significantly by compilation. Engineering, scientific, game and business programs are typical categories.

A very efficient programming technique is to write a program with an interpreter, debug it interactively with the interpreter, then compile it for speed and execution from the desktop. The Philon compiler achieves this, except for speed in mathematics routines. During the course of this review, two speed tests were run. One test was a repetitive number cruncher and the second, a character string sorting routine. The math test ran SLOWER under the Philon compiler than it did from ST Basic, while the sort test ran faster. The Philon code does run directly from the desktop and will compile ST Basic files, provided the commands used in the ST Basic file are common to the Philon dialect.

The major uses for the compiler would be in applications requiring considerable math accuracy. Engineering, scientific and business applications seem appropriate, although they may run slower than expected. Additionally, the compiled program runs directly from TOS - loading ST Basic is not required.

ST Basic has a rather large vocabulary of about 170 commands. Of these, there are 60 that are not available to the Philon compiler, leaving about 110 common commands. The major categories of non-compilable commands are:

- Graphics
- Sound
- Window control
- Programming and debugging aids
- VDI and AES calls

There are 23 commands available in the Philon dialect that are not supported by ST Basic. They are largely compiler directives, but there are two very useful commands - PRINT@ which allows specification in x-y coordinates of the location on the screen where the PRINT is to occur and INKEY$ which causes the CPU to wait for an input from the keyboard before executing the next command.

Installation. When the Philon package is first opened, it is intimidating. There are five disks and a three ring binder of documentation 5/8 inch thick. Fortunately, this mountain of paper is mostly reference material describing each command in exquisite detail and is not necessary for many compilation tasks. What the documentation desperately needs is a "Read Me First" sheet in the very front of the document. In fact, all that is needed to get started are the Installation Instructions - 4 sheets of paper stapled together in the pocket on the inside back cover.

Installation proceeds very smoothly in nine steps and the final few steps include the enormous satisfaction of compiling a sample program and seeing it run. POTENTIAL BUYERS BEWARE: The minimum hardware configuration absolutely requires two floppy disk drives. The compiler CANNOT be used with only a single floppy drive. A single floppy drive and a hard disk is the preferred combination. This configuration will compile faster and avoids disk swapping. Typical compilation time is a lengthy 20 minutes using two floppies and requires swapping disks 2, 3 and 4 (in order) in drive B while leaving disk 1 in drive A. Compilation of the Philon sample program is an excellent introduction and the source code provides a very useful model.

Preparing Source Code. Having gotten the compiler installed and the sample program compiled, the urge to write my own test program and try it was overwhelming. Once again, there seemed to be an insurmountable barrier: How is source code created? There is no editor shown in the table of contents. As a last resort, I began reading the documentation. The beginning of Chapter 2 says that "any standard text editor" can be used. At this point the light dawned: Look on the utility disk which was used for installation. And lo: An editor called Micro EMACS plus a 60 page tutorial can be found. (The expansion of the acronym EMACS is Editor MACroS - created at MIT sometime between the dark ages and the rennaissance.) Once again, the light dawned: ANY word processor, text editor or Basic interpreter capable of producing an ASCII file can be used. This means that a program can be written in ST Basic, saved to disk, run under ST Basic to interactively debug it and then compiled with the Philon Fast/Basic-M compiler.

As an intermediate step, word processors such as ST Writer and Regent Word (but not 1ST Word) can be used to edit the source code in order to change non-common commands. As an example, CLEARW2 must be changed to CLS to go from the ST Basic dialect to Philon's dialect. The search-and-replace function in most word processors can be used for such changes. Alternatively (and pretty risky!), the entire program can be written with a word processor and compiled. Debugging a compiled program quickly makes one apppreciate an interactive interpreter.

Compilation. Once the source code is created and stored in ASCII format it can be compiled. The file must be on disk one. Since the compiled files are quite large (on the order of 70K bytes), only one compilable program should be on the disk at a time; otherwise the disk fills up during the final linking process, producing an enigmatic

```
LINK68: WRITE ERROR ON FILE: <FILENAME>.68K.
```

If this error appears, it means the disk is full. (Why can't they say so? It cost me a $1.75 phone call to Philon to find this out!) In any event, disk one with source code goes in drive A and disk two in drive B. The source code MUST have an extender of .MB. On screen directives will indicate when to swap disks - this is done in drive B only. Disk one remains in drive A. Patience is required when running disk four. It typically requires about 15 minutes to complete the linking. If all goes well, you will be rewarded with an unceremonious return to TOS. Double click on <filename>.PRG and it should run.

Speed Comparison. After all this discussion, just how fast is a Philon compiled Basic program? Sadly, I'm forced to conclude that for math applications, it is just plain SLOW. And math intensive applications are a major motivation for buying a compiler. Since the compiler will not compile graphics commands, it is not especially useful for compiling games written in Basic either, unless all graphics are done through VDI calls. Sorting applications, however, do appear to run substantially faster.

Two rather different speed tests were run. The actual numerical results are shown in the table. One test was a number crunching test that calculated the square of the cosine of an index that varied from one to 10,000. This test was not intended to be exhaustive; rather it evolved from a desire to walk into any computer store and try out something quick and dirty as a rough speed comparison between different machines.

The other test was a random character string test. The program was arranged in three parts. The first part generated 1000 random strings; the second part sorted the strings alphabetically and the third part simply printed the alphabetized list to the screen as proof that the program worked.

Comparison of ST BASIC and Philon BASIC Speeds
(Execution Times in Minutes:Seconds)

Test:	A	B	C	D
ST Basic	0:51	1:09	5:04	1:45
Philon	1:39	2:04	2:25	0:36
Opt. Philon	1:37	2:04	2:25	0:36

Test	Description
A	1<=I<=10000, COS(I)^2
B	Generate 1000 random strings
C	Sort 1000 random strings
D	Print sorted strings to screen

Note that the math test required almost twice as long for the compiled version to run compared to the interpreted (ST Basic) version. Now that is awful! There are two reasons I can think of:

(1) Philon uses 64 bit words for a numerical accuracy of either 14 or 16 significant figures. ST Basic uses 32 bit words for a numerical accuracy of 6 or 9 significant figures. The extra word length takes time.

(2) Philon apparently links the entire library of Basic functions to the program rather than only the functions actually needed. It is possible that the program must examine the entire library in some fashion to find a needed function. The evidence for this is that the optimizer directive which is supposed to remove unused code does not create appreciably smaller files - nor do they run significantly faster. Yet a very simple program to print out a statement requires on the order of 70K bytes of machine code!

The actual sort portion of the compiled version of the second program ran in somewhat less than one-half the time of the ST Basic interpreted version. Now that's more like it! Note also an almost 3:1 speed up in printing out the strings on the screen.

Final Thoughts. I had occasion to call the company twice. It is refreshing to find a telephone number that works on page 1-1 of the manual. Both calls were answered promptly and courteously; I was referred to someone who listened, was willing to help and, miracle of miracles, called me back in about half an hour with the answer to my problem!

The compiler exhibited NO bugs, although I did not exercise all the bells and whistles. Nonetheless, I think this is remarkable for a new product.

The version I reviewed (V1.3) does not support graphics. An updated version 1.35 claims to support graphics, but only through rather complicated VDI calls. It will not compile such commands as COLOR, CIRCLE, PCIRCLE, etc.

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GOING ONLINE

by Ed Seward

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SIX ST TERMINAL PROGRAMS

A Comparison of Features

First, a little background. I bought my first modem (an 835 for the 800) 2 1/2 years ago. As is very common, I worked through DISKLINK, TSCOPE, HOMETERM and AMODEM 7.2. A lot of ST owners, like myself, are used to the excellent terminal programs available for the 8-bit line. It was this and my getting my first Hayes compatible modem that led me to look for a reliable terminal program with a LOT of features. Some people may just want an inexpensive, easy to use program. Others may want to have an abundance of features. Regardless of which type of terminal software you are looking for -- read on. Although this comparison isn't complete, it does include most if not all of the popular programs. You're bound to find the information below helpful in making your choice.

<u>Some General Overviews.</u> In looking at the RS232 configuration for reach program, I like the ability to set the whole configuration from within a program. Two programs, ST-TERM and PC/INTERCOMM, do this from one sub-menu. Two programs, MI-TERM and FLASH, use the easier and nicer method of a GEM dialog box. With the last two programs, one just clicks on the appropriate buttons to make the settings more quickly. Most BBS's and services support <u>8-bit words</u> and <u>one stop bit</u> with <u>no parity</u> so the two programs without internal RS232 setup, CHAT and ST-TALK, can get by in most cases.

<u>Disk Functions</u>. Another category I look for is the built-in disk functions; particularly directory listings and change pathname. Three lacked any disk functions -- CHAT, MI-TERM and PC/INTERCOMM. MI-TERM and PC/INTERCOMM do allow one to exit the program without hanging-up the modem. In my opinion this defeats the purpose of having a powerful computer like the ST -- its like driving a car without a gas gauge.

The change pathname or default drive commands are good for switching the default to the B: drive or ramdisk without having to constantly include the drive identifier in the filename. These are the necessary commands. One program, ST-TERM, has an abundance of built-in disk functions. The comparison chart below lists the disk functions supported by each program.

<u>Supported Emulations and Translations</u>. Having a common emulation makes for easier hookup to different systems. It isn't necessary to have an emulation just for BBSing, but it does simplify setting up your terminal defaults when signing on to a system for the first time. The VT52 emulation is very easily accessed in the ST and is thus available in four of the programs. Three of the programs (FLASH, ST-TERM and PC/INTERCOMM) also emulate a VT100 or ANSI terminal which is required to fully access some mainframes (ST-TALK emulates a VT52 but not the VT100). FLASH is the only one to directly support Vidtex graphics and allows one to save a screen image in DEGAS format. A light ATASCII translation is supported directly by ST-TALK and ST-TERM. FLASH can handle the ATASCII by converting the translation table as necessary. It is nice to be able to deal with the ATASCII translation so that one can take fuller advantage of the 8-bit Atari BBS's.

The translation table in FLASH is very handy to have. It allows one to selectively translate an incoming or outgoing character to another character. The best example of this is the conversion of the ATASCII EOL to an ASCII LF. FLASH and PC/INTERCOMM are the only two programs in this comparison with translation tables.

<u>Macros and Functions</u>. Five of the programs have macro capabilities. A macro basically allows one to "can" a particular string or key sequence that is used frequently.

Both FLASH and MI-TERM give one the option of using keys or the mouse and the GEM menu bar for frequently used functions. FLASH goes one step further and allows one to access everything from a command line thus streamlining its use once one is familar with the program.

FLASH and MI-TERM have the ability to dial automatically and log one onto a system. (FLASH does this from a 60-number directory and I found it easier to setup partly because of having a lot more commands to work with.) ST-TERM has the biggest autodial directory with room for 400 numbers. ST-TERM doesn't have the auto-logon capability but it does keep the RS232 configuration, password and account number for each phone number. The password and account number are then accessible as macros after connecting as ^P for password and ^N for account number. ST-TALK and CHAT do have autodial directories of 26 and 24 numbers respectively. CHAT, FLASH and ST-TERM are the only ones of the six that have auto-redial. None of these programs have the ability to scan a list of phone numbers until connecting with one of the selected numbers. The ST BBS's are getting busy and this would be a nice feature to have. *(Ed. Note: Alan Page has just made a patch available for FLASH to do this. You can find the patch on CN Lib disk #43.)*

<u>File Transfers</u>. Two people recommended tests in this area -- Joe Waters suggested timing XMODEM U/L and D/L of the same file and Moksha Raver pointed out that all ST terminal software has trouble transferring files to Atari 8-bit BBS's. To test these programs, therefore, I found a DEGAS low resolution (not squeezed) picture file. I then proceeded to upload and download that file with each program to the WAACE ST BBS which is running FOREM ST on a 512k ST. All transfers were done straight to and from disk without a ramdisk. The results are shown in figure 1.

Figure 1. ST BBS XMODEM Timing

Program	--Uploads-- time	blocks	-Downloads- time	blocks
CHAT	6:19	128	6:12	128
ST-TALK	6:56	4	6:53	2
ST-TERM	7:50	8	7:44	8
FLASH	6:30	32	6:38	32
MI-TERM	6:33	50	6:20	50
PC/IC	7:47	4	8:00	4
Average	6:59		6:58	

Moksha's remarks interested me so I tried to download a file from ARMUDIC (running FOREM on a modified 400 with an ATR8000). All of the programs failed to properly transfer a file. The results are in figure 2.

The failures of all of the terminal programs to download properly from an 8-bit Atari BBS lies in the AMODEM variation of XMODEM. On other systems (Compuserve, Delphi, and non-8-bit Atari BBS's) I've used PC/INTERCOMM, ST-TALK, ST-TERM, FLASH and MI-TERM to download files over 512 blocks long without any trouble at all. In the preparation to receive or send XMODEM, only one program allows one to set up the file on disk to save to or read from before telling the other system to start -- that one being ST-TERM. The two programs that use GEM, FLASH and MI-TERM, are of course the only two that provide the "Item Selector" box to choose a file name to upload or download.

Figure 2. 8-bit Atari BBS XMODEM

Program	Block # failure	Programs message
CHAT	130	goes into a loop, hung system
ST-TALK	256	gave up after 9 tries
ST-TERM	512	after 511 blocks, nothing saved
FLASH	256	synch error
MI-TERM	256	wrong block sent
PC/IC	256	block 1 received, aborted

<u>A Look at the individual programs</u>. To give this section some organization, I'm going to start with the program with the lowest list price, CHAT, and work up to the highest, PC/INTERCOMM.

CHAT v2.0 ($15.99)

There are two nice features in this program. CHAT allows ten macros for each number in the dialing directory. CHAT also has autoredial. When using XMODEM, the buffer sends and receives 128 blocks between accesses to the disk.

The things that bothered me about this program were numerous. First is the lack of any disk functions -- no directory listing and no change pathname command. A program without these is starting off with little chance of my liking the program. With a half or 1 meg machine and the documentation available for the ST there is NO excuse not to provide these commands in a commercial terminal program. Some of the other things I didn't like were separate configuration and dialing directory edit programs. Neither of those programs displayed an error message when trying to write to a write protected disk. (It didn't cause me any problems, its just that poor error trapping goes against my programming background.) Both the autodial and function help menus appear on the 'same screen' as the terminal mode, thus scrolling everything off. A simple change of the screens pointer in memory would allow quick changes between screens. The last problem is the lack of even a VT-52 emulator which Atari makes readily accessible.

In summary, I found CHAT too antiquated in user-interfacing and tired of it quickly. Even for the low price I can't recommend this program.

ST-TALK v1.1 ($19.95)

The features that CHAT has and ST-TALK doesn't are macros and auto-redial. However, with ST-TALK one gets a VT-52, some ATASCII emulation, and internal modification of the autodial directory. ST-TALK also has the list directory and change pathname commands. Unlike CHAT, ST-TALK (and the other six programs) uses 'separate' screens (different screen addresses or pointers) for terminal mode, function, help and autodial menus.

The function keys are used to access a majority of the functions within CHAT and ST-TALK. I do have to say that I found the 'feel' of ST-TALK to be nicer. That is, the time was taken to pretty up ST-TALK and ease its use rather than just output some text on the next line asking for a filename or whatnot as is done in CHAT.

Although this program doesn't have as many functions as the higher-priced programs it does work well and is very easy to learn. This is a good program for someone that is just getting into telecomputing and doesn't want to spend much money.

ST-TERM v2.0 ($34.95)

As a look at figure 3 shows, this program has quite a few features. This was the first program I was really happy with.

Disk functions are in abundance within ST-TERM. Along with the 'necessary' commands like list a directory and change path, ST-TERM also has format a disk and copy a file just to mention a few. Another nice feature is the ability to edit the modem commands used by the program. For example, the Avatex 1200 doesn't support the Hayes hangup command ('ATH0'). To have the auto-redial work within ST-TERM with the Avatex modem, one must change the 'ATH0' to just 'AT'. (A blank or just a C/R just continued to cause errors.)

Whereas CHAT and ST-TALK relied on the function keys for functions, ST-TERM provides access to the functions through a menu as well as with the 'Alternate' or 'Alt' key used with another key. This makes XMODEM as easy as "Alt-S" for XMODEM-Send. One can toggle the 64k capture buffer on and off with an "Alt-C". As you can see this makes things fast and easy once one becomes familiar with ST-TERM. The use of the 'Alt' key for functions also allows for more functions. This leaves more of the function keys free for macros. As I mentioned earlier, the RS232 configuration is saved with each number in the autodial directory. Another nice feature is the ability to load ST-TERM's settings in from a 'SET' file.

Other things that stand out in ST-TERM are Kermit batch file transfers, VT100 emulation, a VT52, support for some ATASCII translation and the Amodem version of XMODEM (as well as the standard XMODEM), and a status screen.

Despite how much I like the program, I have to point out a couple things I don't like. The clock/timer is only visible when one calls up the status screen. Also, I couldn't get a configuration of 8-bit word, no parity, one stop bit (8,N,1) to work at 1200 baud on CompuServe or Tymnet. I had no trouble with any other BBS or system with this configuration. (I had the same problem with MI-TERM.)

FLASH v1.0 ($39.95)

Let me start with the five things I found missing from FLASH. It doesn't have a format disk or copy file command (ST-TERM is the only program with these). FLASH doesn't have a transform colors nor a conditional branch or loop statement in the choice of commands (in fact, none of the programs have these). FLASH also doesn't support Kermit file transfers. (Personally, I don't need Kermit protocol. In testing it in the two programs that supported Kermit, I was amazed at how much slower it is than xmodem.) <u>Everything</u> else I looked for is in FLASH -- plus a whole lot more. On to the structure of FLASH.

There are two screens used within FLASH. the manual refers to them as "terminal" and "capture". The terminal mode appears as an ordinary screen with a single status line. However, because FLASH uses GEM the Help screen is actually four dialog boxes called up in sequence that display the available commands. File transfers bring up that familiar 'Item Selector' box to allow easy viewing of the files already on a particular disk. (Two things I like about both ST-TERM and FLASH is that listing a drive's directory is as simple as "Alt-1" or "Alt-2"; and the file sizes are included in the display.)

The second screen or "capture" is a window with the standard slide and menu bars. FLASH is the only terminal program in this comparison with a built-in text editor. The editor has a few block commands and allows the use of the arrow keys or the mouse to position the cursor. Having an editor of this type included within the program makes it much easier to edit messages and EMAIL on the various services and BBS's. The editor can also be used to edit the capture buffer before saving it to disk or for editing the 'DO' files.

What is a 'DO file'? That is a text file containing commands recognized by FLASH. Not counting variations of any one command, there are 69 commands available for use within a DO file or the command line. (There are 19 commands using the 'Alt' key to provide faster access to frequently used commands.) Now back to those 69 commands. In the dialing directory it is possible to assign a DO file to each phone number and set the number of redials from 0 to 99. When one connects, the DO file is executed. It is also possible to have a DO file that waits until a particular time and then starts executing the other commands. The best example of this is to have FLASH wait until 2 in the morning to call Compuserve, execute a logon sequence and then scan for messages and/or download a particular file. The reason for having FLASH wait until 2 AM is the system response time will be faster due to fewer people being online. With a DO file one can also load a different function key definition file, translation table or flash configuration file. One DO file can also call another. My use of DO files is spreading rapidly as my library of "DO files" grows.

Another area controlled by the user is the way files are uploaded or downloaded. In the XMODEM area there are 8-bit/CRC, and 8-bit or 7-bit checksum transfers. Also, one can have FLASH pad the last block with control-z's as per 'standard' XMODEM or use a size block as the last block as is done in the AMODEM (Atari 8-bit) version of XMODEM. In the ASCII file transfer section there is again quite a bit of user control such as toggle DC2/DC4 control and toggle linefeed strip to name a few.

I should also mention that Ian Chadwick (of Mapping The Atari fame) helped with the documentation. With illustrations the manual covers 50 pages (each approximately 6 inches square). I found the reading very smooth and the structure of the manual excellent. The section that has proved essential is "the FLASH Referance Guide" which covers twenty of the fifty pages by itself and provides a brief rundown on each command.

For the numerous people who have bought FLASH I should tell you that Alan Page is slightly modifying FLASH. First, the RS232 incoming buffer is being enlarged to take care of some minor display problems at 9600 baud. (A public domain program for those that won't want to send their disks in is available on CN disk #43 -- 9600.PRG.) Other improvements and/or corrections include speeding up the ASCII upload and adding "Alt-W" key combination to clear the buffer. He is also adding "Document installation" support. If one double clicks on a DO file then FLASH will run and execute that DO file.

Supposedly having finished the comparison, I just made a visit to Compuserve and a patch for FLASH has been made available -- FLSPAT.TOS and FLSPAT.DOC. The DOC file explains how to set up FLASH to dial through a list of phone numbers. The examples show how to go through a list of BBS's and be prepared to logon to each of those that isn't busy. The examples also show how to setup for continuous dialing of a list of numbers until connecting to one.

MI-TERM v3.0 ($49.95)

This program was the first commercial terminal program for the ST to use GEM. Overall MI-TERM is a pretty good program, but it does have a couple problems. First, MI-TERM is another of those programs without any installed disk functions. I find that a nuisance. However, it was pointed out to me that the DOS exit doesn't have to be a generic (public domain) "COMMAND.TOS" -- that is the filename that MI-TERM looks for when using the DOS exit. Two good files to use in this situation are "DOS Shell" and "Micro C Shell". At least with this type of exit one has easy access to a complete set of disk functions including changing the default drive. As is the case with the majority of the programs Kermit transfer protocol isn't supported. Another thing is that there is some 'color shattering' at higher baud rates. I also found the functions for use within the presets (these are similar to the function keys in FLASH in that one can assign a string of commands using special function commands) awkward and limited.

MI-TERM does have quite a few features that I liked. Among these is having access to the GEM menu bar at all times. This allows one to use the mouse or an "Alt" key combination to execute one of the functions. Another useful feature is the function to print out the presets. This is important since one can load in different presets and having a listing of the presets simplifies things quite a bit. As in FLASH the desk accessories are accessible from within MI-TERM. Throughout MI-TERM GEM has been used to good advantage. For file transfers a GEM 'item Selector' box is displayed to select a filename. During an XModem transfer a different box is displayed to keep one informed as to how the transfer is going. The use of another box for the transfer status is a nice touch.

By the time you read this a new version of MI-TERM will be available -- version 4.0. As I won't get a review copy of this until after Current Notes has gone to press, I'll pass on what I was told by J. Weaver Jr. the programmer of MI-TERM. The size of the program itself (ver 4.0) is just over 84k. One can set time limits/delays of 0-255 seconds for phone redials along with a wait until a specified time to execute a preset. The command set has been enlarged to 45 commands with 15 commands per preset. The preset editing has been changed to use three windows. In the top left of the screen there is a window list of the presets; in the top right of the screen is a window containing the preset being edited, and in the bottom right is a window containing all the commands. To edit on, select a preset in the first window, then click on a command and drag it to the desired location in the window in the top right of the screen. If a parameter is required for a selected command, then another window will appear requesting the necessary information. A branch command has been added in case of errors or timeouts. (The commands have been changed to "script" and a conversion program is on the disk to convert the old style presets -- one won't have to rewrite all their presets.) Another thing is that the "color shattering" at high speeds has been taken care of and the buffer works better now. (I didn't have any problem with the buffer at 1200 baud.) Lastly, Mr. Weaver has added split screens to MI-TERM.

If you already have MI-TERM, remember that Michtron's upgrade policy is detailed in the back of the manual.

Figure 3. ST Terminal Program Feature Comparison List

Feature\Program	CHAT	ST-TALK	ST-TERM	FLASH	MI-TERM	PC/IC
Supports GEM interface	No	No	No	Yes	Yes	No
Desk Accesories accesible	No	No	No	Yes	Yes	No
If GEM not supported						
are multiple screens used	No	Yes	Yes			Yes
Documentation 1-10 (10 best)	8	6	8	9	9	10
ERROR trapping	Poor	Good	----------Excellent----------			
RS232 Configuration	External	External	Menu	Mouse	Mouse	Menu
VT52 Emulation	No	Yes	Yes	Yes	No	Yes
VT100 Emulation	No	No	Yes	Yes	No	Yes
ATASCII supported	No	Yes	Yes	(1)	No	No
Internal DOS functions						
Directory listing	No	Yes	Yes	Yes	No	No
Path Change	No	Yes	Yes	Yes	No	No
Disk Format	No	No	Yes	No	No	No
Copy a file	No	No	Yes	(2)	No	No
Type file to screen	No	No	Yes	Yes	No	No
Print a file	No	No	Yes	(2)	No	No
Erase File	No	Yes	Yes	Yes	No	No
Rename File	No	Yes	Yes	No	No	No
Transfer protocals						
XMODEM	Yes	Yes	Yes	Yes	Yes	Yes
Kermit	No	No	Yes	No	No	Yes
Built in autodial directory	Yes	Yes	Yes	Yes	No	No
No. of numbers	24	26	400	60	0	0
automatic redial	Yes	No	Yes	Yes	No	No
FUNCTION keys (presets)	Yes	No	Yes	Yes	Yes	Yes
number of keys	10	0	20	20	26	20
strings only	Yes	na	Yes	No	No	No
reloadable	No	na	Yes	Yes	Yes	Yes
Timer	No	Yes	Yes	Yes	Yes	Yes
visible at all times		Yes	No	Yes	Yes	(3)
timer start on logon		Yes	Yes	Yes	Yes	Yes

(1) - ATASCII can be used through a translation table
(2) - these functions can be achieved by loading a file into the editor/capture buffer
(3) - PC/InterComm doesn't update the timer display during file transfers

Programs reviewed

CHAT, v2.0,($15.95) from SST Systems, PO Box 2315, Titusville, FL 32781
ST-TALK, v1.1 ($19.95) from QMI, PO Box 179, Liverpool, NY 13088
ST-TERM, v2.0 ($34.95) from Commnet Systems, 7348 Green Oak Terrace, Lanham, MD 20706
FLASH, v1.0 ($39.95) from ANTIC, 524 Second St., San Francisco, CA 94107
MI-TERM, v3.0 ($49.95) from Michtron, 576 South Telegraph, Pontiac, MI 48053
PC/INTERCOMM, v3.03 ($99.95) from Mark of the Unicorn, 222 Third St., Cambridge, MA 02142

PC/INTERCOMM v3.03 ($99.95)

Before I got PC/INTERCOMM I had heard two things about it. First, it could be configured to connect to access practically any system with the ST. Second, there are no built-in disk functions. Both are true. However, two of the lower priced programs (FLASH and ST-TERM) support the VT100 emulation and ST-TERM supports the Kermit transfer protocol.

The main thing I like about PC/INTERCOMM is the explicitness of the error messages. (The error message in the XModem test on an 8-bit Atari BBS, figure 2, being an excellent example.)

Another good point for those that don't mind a lot of menus is that essentially everything can be done from one menu or another. (My point about the menus is that a couple dialog boxes properly done could eliminate quite a few menus.) The menus are even used to select the default transfer protocol from: raw ascii, DC2/DC4, MODEM7, Kermit and Kermit Image.

One could create an autodial directory of sorts using the function keys. To do this set up a command string to dial a number and log one on to the specified system. One could do this for each function key and save the resulting setup as a directory. After connecting to a system one could then load in a different setup file with function keys appropriate to that system.

PC/INTERCOMM does have a lot of useful features. There is the ability to save and load setup or configuration files similar to ST-TERM, FLASH and

MI-TERM. The setup/configuration files are easy to set up using the multitude of menus. The manual is such that one could practically use it to teach a course in telecommunications -- 129 pages (5x8 inches). The manual guides the user through the various functions step by step.

This brings me to the negative points. First, the price. With the quality and price of most of the other terminal programs available for the ST, Mark of the Unicorn needs to greatly reduce the cost of PC/INTERCOMM to be competitive. Second, I don't like to repeatedly go through several levels of menus. Adding more "Alt" key combination commands would help quite a bit. Another missing feature is an autodial menu. True, the setup file can store one phone number. However, when one system is busy, I just move on to another or just use auto-redial which is also missing.

Overall, PC/INTERCOMM is a good program but not for the average user. This program is more for a business that needs to connect with a DEC or VAX system; and is going to have people with varied amounts of telecommunications experience using PC/INTERCOMM. Even then, one should seriously consider ST-TERM or FLASH.

A SUMMARY. Now I suppose a lot of you would like me to recommend one of these programs. First, there are two programs that I can't recommend; one is overpriced and the other needs some more work -- they are PC/INTERCOMM and CHAT respectively. The best recommendation I can give one of these programs is to say that I use it almost exclusively since finishing up the comparison -- that program is FLASH.

Coming to Going Online

Supra mailed me a copy of their Omega terminal program but, as of this writing, it had not yet arrived (I guess the mailman's horse is getting too old). So in the near future, I will run it through it's paces as I will MI-TERM 4.0 (I will also be glad to add in other terminal programs for the ST, I receive before the middle of August). In the next column I will include updated versions of all three tables shown in this column along with other applicable information I may receive in the meantime.

I will also return to the 8-bit world to take another look at Games Computers Play and do another comparison of 8-bit terminal programs (in a manner similar to that used above) if I find enough new Atari 1030 compatible material and get enough requests. Among the more general long-range topics I am considering is a look at some of the online services, particularly the Atari SIGs on those services.

I am supplying my various physical and online addresses for those wishing to get in touch with me.

Ed Seward
P O Box 6826
Alexandria, VA 22306

CompuServe: 73476,1664
Delphi: EDSEWARD
ProtoCall: 1.28

FINANCIAL COOKBOOK

- Electronic Arts Raises the Curtain on the ST -

Reviewed by Frank Sommers

Computers are said to be hiding out in homes in ackward crannies. Only the dedicated and the brave boast of withdrawal symptoms when distanced for extra hours from their computer. Only they testify, with steady eyes, that their home now functions appreciably better since "the machine" came thru the door. Others, too many for the good of the world of computers, ask, "How much faster do you with your computers find your receipes, balance your accounts, mangle your budget, list your records, record your valuables, diagram your new kitchen floor plan, or compose your songs?" The high heads, the positive voices,(except for those who shun their Calvanist upbringing and maintain entertainment is good for the soul, and they may comprise three quarters of the regular home users), these other proud few cry out that the word processor and all its spin offs can not be equaled or replaced. But then there is mostly silence.

But now Electronic Arts has produced a program that dances right up and answers the challenge and the call for more utilitarian, user-can't-do-without software. Their entry into the increasingly proud world of the ST, is a prime example of how computers could and can save time, make you smarter, expand your vision, and leave you satisfied and pleased that you have one. Thirty two programs, or financial formula, artfully combined into one program with a fool proof menu, and a walk-thru, fill in the blanks, and get the answer approach, the program is Useful Plus.

High finance it can be or practical in the extremity, without requiring, in fact presuming, math and formulas are not necessarily your bag. For a person who gave up electronic check juggling, after six months of slavishly entering the data in a well-done 8-bit program, FINANCIAL WIZARD, and never getting closer to + or - 80% of my real balance, I found FINANCIAL COOKBOOK a marvel (for one thing it doesn't fool with checkbooks, except indirectly).

Your enthusiam takes off as you eye-ball the documentation. On a scale of 1-10 or Poor to Excellent, it's easily a 9.5'er. (The half point off is because pages 2 and 3 cite a "catelogue" gem menu which does not exist for the ST.) Electronic Arts has concisely pressure-packed a mini-course in financials into 29 pages of command summary, tutorial, receipe notes for each individual program, a one-page appendix with all of the formula for the algebra gang (one's that will be back at you most of your life, by the way), a glossary of terms - yet another course by itself. All of this in a hard-cover folder with disk, and yes, a folded command-summary card of six sides. In sum, the package would warm the cockles of an instructor's old heart: tell it to them once, then repeat it as many times as you can, and then emphasize it for them again.

For those of you who would prefer to find answers to one time problems rather than challenge Senator Kemp for the econ prize of 1986, there is an index that is broken down by the kinds of problems you may have, and directs you to the receipe that will solve it. So don't wander around the 32-item menu, experimenting with choices. Page 29 tells it all.

The tutorial contains one of the great phrases in the booklet. In explaining the 5-step approach in finding answers to basic financial questions, it suggests a sixth, "What If....", what if you changed the interest rate, or stretched out the payments, or deposited more each month, or took out a new loan, or.... FINANCIAL COOKBOOK was designed especially for the "sixth step", i.e. changing one figure, clicking on Compute and then seeing the new "numbers" flutter up onto the screen over the original calculation. This can be done up to four times without losing the 1st numbers, allowing you to flip back and forth comparing the differences in the data. And what was that premier phrase? "And with every try, your feel for how money works will deepen." A verity.

Setting up the program so you can start expanding your financial future immediately is but a two-step process. Once the menu is up and smiling at you, with 16 programs listed, and a click on "More" and 16 more appear, you are adivised to attack possibly the most complicated step right away -- finding your Marginal Tax Rate (a combination of federal and state rates charged for each $1 you earn above the middle of your bracket, in briefest terms). Receipe #1 computes that for you in a mili-second after you feed it with your tax data and rates. Step two is optional, filling out a 8-item financial profile that can be saved and automatically inserted where appropriate throughout. This includes rates for the three marginal tax items, capital gains, mortgage and interest you receive, and finally inflation rates.

Once this simple bit of complexity is mastered you are off and soaring toward just about any financial horizon you wish, soaring for answers to questions about capital gains investments, IRA accounts, college expenses, insurance needs, T-Bills, tax shelter investments, and rate of return. Fine and what does all that translate to for the average household vs finance company? Leasing your car vs buying it. Or that thing that's behind the local boom in housing sales, refinancing your home to obtain lower interest rates and with the savings buying a new domicile. Or you may wish to explore the effect of inflation (circa 4% now, but not long ago several times higher than that and likely to move up by 50 or even a 100% in the next few years, i.e. 6-8%) on your money and how best to use it; "Ignoring the effects of inflation on your money is like ignoring the effect of friction on your tires", is FINANCIAL COOKBOOK's second truth.

The programs are not merely for the literati of the accounting world. Young Randy or Jane may indeed choose to switch disks and find out what the $500 their wealthy grandfather invested at 7% for them will be worth ten years from now.(About $10018, but only $180 more in purchasing power because of Truth # 2, inflation, and that's assuming they pay no taxes on it!)

That may be depressing to some. But what about a real investment? Say $15,000 in 8.5% certificates of deposit and how big a bundle will that be if you keep it hands-off for 5 years? Well, $22936, not bad, but if you factor in a Marginal tax rate of say 27%, after taxes, how big? Down to $20,523. Now what about inflation at 6%? The bundle shrinks to $15336 in terms of 1986 purchasing power, about $60 a year in real rate of return. And thus the moral might be consider growth in addition to mere interest rates on your investments.

But enough! The good news is the program itself. Electronic Arts and author Stan Trost, who produced the program for the 8-bit machines three years ago, are to be commended. The two gentlemen, Randy Crowe and Ed Luebke, who converted it for the ST, are equally deserving. Whoever is the author of the documentation deserves yet a greater cudo for making this the truely user useful program it is.

Now if you invest the $49.50 price of the program at 9%.......

CORNERMAN Ver. 2.0

- Sidekick Revisited or Bettered -

Reviewed by Frank Sommers

Those of us who have kept our eyes pointed toward the sun, no matter how depreciating the reaction when we announce that we are "Atari originals", have also of course, secretly, lusted after a juicy item out for "The Big Blue", from time to time. Such a program, for many of us, was "Sidekick", that IBM desk accessory that let you keep everything at your finger tips -- all those notes, calls, calculations, and real time clocks to annoint your programs as you prepared them. Michtron heard our groans of lust and have sent forth aid. It's called "Cornerman" because of where it rests on your screen.

Once booted, (you sense extra bytes are being fed into memory due to the extended boot time), the screen appears just as you have preferred and saved it. But a click on the left corner and there it is! IBM keep your "Sidekick".

The menu centers on your screen and offers you a range of seven aides -- a real time clock, which must be set, a phone book and dialer, an ASCII table that provides the ST symbols and also hex and decimal values for them, a 16-digit calculator, a notepad, a coffee break 15-squares game, and a DOS window to take you out of GEM and into any DOS shell program of your choice. You also have a Setup submenu and a printer facilitator

Are these real desk tools? Are they readily available? Are they items, on average, which you will use with regularity? Or are we merely slowly advancing from checkbook balancing to another stage in the slow progression, where we wait for software developement to catchup with the amazing advances in hardware?

My eagerness to have access to such a utility may have cloaded an otherwise tender palete. I fell on the Notepad, and immediately began stuffing it with bits on the contents of Cornerman as I was prodding my way thru the various screen menus; looking first at one menu, I would then click up Notepad and jot down the items it contained and then bounce on to the next one. I furled a brow at the first hint that space on the pad was limited, and then my eye brightened when I realized it was disk driven and you could save as many messages as you wished or your disk had space for. The same was true for the phone dialer and phone book. I quickly loaded in several numbers and then tried a safe one, with my modem on. (An early error message tells you if your modem is dangling while you are booting up, and if it is not on, you are informed your dailer will not dine with you this day, with a big black flashing error signal.)

You might ask, how will ASCII tables help the non-programmer? For openers, several print configure programs ask for input in hex versus decimal. The Calculator is an item that for many may not be a vital companion. For others it might supplant the Notepad in popularity. As a friend once said, when asked why he was liscened and wore pistols, under his suit jacket, "You feel like an ass, when you need them and they aren't there, Dave."

Finally, the clock works it way into your psyche. We that are unaccustomed to seeing the time up at the top of the screen and having it printed out with a date after each program you save, may question its true need. The fact is that after a day or two of use, you feel naked, if you have forgotten to click on Setup and tune in the hour along with the date.

The phone dialer and phone log for those with modems is well conceived itself. The Dialer has six lines of data entry for Name, Company, Address, City, State and Zone. The phone can be set to local or long distance. The phone log is a separate window and annotated for, "Call completed,left msg, line busy, no answer, finished, call back, will call, wrong person, and a time entry line. All of this with a ticking digital clock at the top of the menu.

What's wrong with this program? Unfortunately one major thing. If you are deep into H&D Base or DBman or Regent Word or STwriter, you can not access it without first leaving the program. It requires a GEM drawdown menu, and any program that closes you off from this, also closes you off from Cornerman. So happiness is sometimes half a loaf. The program has high utility potential, but so much higher would it be, if you could click on two keys and have it surface no matter what program you were involved in. Michtron can it be modified, or is that an entirely new prescription?

CARDS

Reviewed by Joe Kuffner

Cards generally refer to games played with the standard deck of 52 playing cards. Well, opening this new software package from Michtron, Inc., and programmed by J. Weaver Jr. for Factory Programming reveals a disk and manual but no deck of cards. Was I disappointed? No way! This entertaining program offers FIVE(!) popular card games for your amusement and personal challenge. These games include Cribbage, Solitaire, Blackjack, Klondike solitaire, and last, but certainly not least, Poker Squares.

Once you load this program, you are presented with a dark window, and a GEM-style menu line. Using the mouse or function keys, you are able to select which of the various games you would like to play. All of the games use the same style of graphics for the cards. Indeed, the cards look exactly as you would expect from a normal deck of cards. Face cards have graphic renderings of knaves, queens and kings. Aces have large, single pips, and even the ace of of spades has a logo for Factory Programming. The colors too, are as expected for both the suits and face cards. Certainly, high quality graphics makes play much more enjoyable.

Now, lets look individually at the games offered. Cribbage, the popular board game of runs, pairs and 15's is played without any deviations from traditional rules. (According to the documentation, all the games play under the guidelines of the "Official Rules of Card Games" published by the United States Playing Card Company, 56th Edition.) The instructions provided with the software package assume that you are already familiar with this game. If you're not, then simply read any book of card games for the rules of cribbage. A unique feature of this version is that there is neither a playing board nor pegs. The scoring is shown in bold red numbers, on the playing surface for each of the two players (only two are allowed to play in this program). All of the scoring is carried out by the computer, so, if your strength in this game is from your "Muggins" (those points that you "steal" from your opponent when he errs), then you won't be winning too many games. The computer plays a solid, but by no means, expert game. It will occasionally make an unwise, or poor tactical play, on which you may capitalize. The means of controlling your cards is with the mouse and button. This is a very natural way to manipulate the cards. However, to enter a "go", it is necessary to hit the return key.

The only disturbing part of this game is the amount of time that the computer takes to count the hands. This is probably programmed intentionally, in order to let the human player have enough time to figure out where the points are. For average players, however, this is unnecessary. Although a bit slow, this is only a minor point and indeed, Cribbage is an excellent programming effort.

Blackjack, the casino game of twenty-one, allows up to four human opponents to challenge the computer dealer. A special window allows you to input players names, stake, and usual betting amount. This information may be updated at the completion of any hand (so, if you run out of money, you may simply increase your stake!). The hands are dealt and each player, in turn, is able to make the standard decisions on hitting, standing, doubling down on any total for two cards (except after splitting), splitting pairs or non-identical "10" cards (10,J,Q, and K's). Blackjack pays one and one-half times bet. All of these selections are made from the keyboard, as there is no mouse interaction in this game. This makes it necessary for all of the playing to be done by a single person, which is fine until that person makes a keystroke error!

Some of the more interesting points of the game are that "5 cards under" (5 cards under 21) automatically wins for either computer or human, as does Blackjack. "5 cards under" is a rare casino winner, but a popular one for "home" rules. It adds an interesting twist to the game of 21. Other features include dealer standing on a soft count of 17 or more, multiple decks are shuffled together for playing, and yet another is that nothing is taken for granted by the computer. That is, other than a Blackjack, if you should have 21, the dealer will still ask if you would like another hit (just like in the casino). This will keep on your toes while playing!

The game plays very quickly, including the dealing and shuffling, and is a joy to both watch and play. The result is a very exciting game of Blackjack.

Poker Squares is not poker, but instead a game of solitaire in which 25 randomly selected cards are played, one at a time in a 5 by 5 grid. The scoring is based on the value of the ten resulting poker hands (5 across and 5 down). The game plays smoothly and quickly and several games can be played in a few minutes. The strategy of the game, although not mentioned in the manual, is to maximize the number of like cards in one direction, and to go for straights and flushes in the other. My personal best score using this strategy is 187 and have had difficulty challenging it. I have no idea what is the maximum score possible (probably 575, which would involve 5 straight flushes and 5 sets of 4 of a kind). A nice feature of the game is the ability to save your high scores.

Although this form of solitaire is not as popular as other variations, I personally found myself playing it the most of any of the games due to its speed, challenge and ease of play. Again, all of the cards are manipulated using the mouse and all the scores are shown after the playing of each card. It is a pleasure to play Poker Squares.

The second version of solitaire, available in Cards, is Klondike. In Klondike, the goal is to win money after buying a deck for $52. The cards are laid out in 7 building piles in which you must build, in reverse order and in alternating suit colors. Also, you may build up on aces in like suits in ascending order. Each card built up on an ace (including the ace) earns you $5. The remaining cards in the stack are played one at a time and are available to place on the building piles. The game continues until no cards are in the stack and no more moves are available. You are able to go through the stack only once.

I'm afraid I rarely won money at this game. However, it was still fun to play, especially since one of the options of the game allows you to clear your deficit total and start afresh. I often used this option! The game plays well under mouse control and the instructions provided are sufficient to get you on your way to playing it. A remarkable feature is how fast the graphics are drawn to the screen, even when moving large stacks of playing cards from one pile to another.

The fifth game in this package is also a game of solitaire and one I had not seen prior to booting Cards. It is simply called Solitaire and the object of the game is to stack all of the cards in ascending order onto the aces of each suit. All of the cards are dealt, face up, into groups of three in which you are able to build up on the aces or to place the top card from any group onto the top of another group, while matching the suit, in descending order (10 on a jack, for example). The instructions provided for this game describe adequately the process involved while playing Solitaire.

The mouse is used for all card activities except for each of the two possible redeals in which the function keys are used. These redeals are very important to the strategy of the game and change the complexity as well. I certainly enjoy this game, but I just wish I could win at this game on a regular basis, so that I could confirm that my strategy of playing is satisfactory to achieve victory on a regular basis. Well, I have plenty of opportunity to gain experience as hardly a day goes by without playing Cards. And that says a lot for this game and for this software package.

Michtron has provided an exceptionally entertaining, and highly addictive program for all of us card players. I highly recommend this program to those of you looking for software that will provide hours and hours of recreation day after day. All of the games play quickly and efficiently and you'll probably find yourself repeatedly using the expression, "Oh, just one more game...".

WORD FOR WORD

Reviewed by Joe Kuffner

Every once in a while, a program appears on store shelves that one can say is perfectly suited to the computer environment. Normally, this relates to a business-oriented application, but on occasion it can be a game. WORD FOR WORD from Bay View Software is definitely one of these programs. The documentation describes this program as a "computer crossword game". Now that is an understatement!

WORD FOR WORD (WFW) in an interactive SCRABBLE-like board game, and more. It provides the opportunity to play SCRABBLE or countless variations of this theme against up to three computer and/or human opponents. Note that the documentation makes no reference to its resemblance to the popular board game (probably, some legal implications). And, what a solid game it plays at the advanced levels. It's far from being a genius, but you'd better have a comprehensive dictionary around (how about these for example: AI, BI, and AE).

The documentation steps you through the basic rules of "crossword games" in a clear, concise fashion. So, even if you've never played these type of games, you'll learn in a few, systematic, short minutes. Also, provided in the manual are instructions on how to use the features of WFW while playing, and on how to design your own playing boards.

The default games of this program, play on crossword puzzle styled grids with six letter tiles and various point/value configurations. These games were entertaining, but personally, I preferred playing under the SCRABBLE set-up and rules.

It took me less than five minutes to design the SCRABBLE board and features. The method of doing this was to use the WFW MAKE program provided with the game playing program. I first selected a grid size of 15 by 15, labelled the appropriate bonus squares - literally, set up the letter values and distribution of the tiles, and finally set the number of tiles per rack to 7 and scored the "use 7 tiles" bonus to 50. Completed, no fuss, no muss. That's what I call user-friendly programming, and Bay View Software is to be applauded for their efforts.

Now, on to the actual playing of the game. When playing, the monitor screen is set to black/gray/white (very appealing) with excellent character resolution. The letters are shown, letter values (if desired), and the playing board. The screen is divided into the playing surface and the working area (for the tile rack and prompts). In the tile rack, you may manipulate your letters with the mouse or simply shuffle them randomly (supposedly to give you fresh word ideas). All the functions are available with the mouse and keyboard (for all you mouse-haters) and all movements are trouble-free and instantaneous. You select your word by typing it, then placing it into the playing area. There it will be accepted and scored or challenged by your opponents. As if all this care-free playing isn't enough, you also have the option of being "assisted" on your word selection by the computer. This makes this game very educational. You can choose your best word and then compare it to the computer-selected word. I must admit that I've been stumped by my letters, only to have the computer offer some very good alternatives.

As you go on, scores are added and displayed, alternating turns until there are no more letter tiles or no more words to be made. The winner is the player with the most points at the end of the game.

WFW has three skill levels to choose from, each progressively more complex in strategy (by looking for more complex word patterns to insert onto the board). I generally enjoyed playing at the advanced level, as it was the most educational and entertaining. However, the basic underlying strategy of WFW is to place the highest point valued word onto the board without regard for opening/closing positions or for saving desirable letter combinations for future use (i.e "ing"). This is a simple and effective strategy for most game players.

Time limits per turn are also available for imposing on the computer players. I feel that it is slightly unfair to limit the computer in time for "thinking", as the human players are allowed unlimited times. However, it is also possible to allow the computer unrestricted time and in general it never takes more than a couple of minutes for its selection, so, the game is not unduly delayed.

With such an excellent and entertaining program, it is difficult to mention any of the quirks of WFW, but, since this is an objective review...

Unfortunately, there is no game-in-process save feature. If you should need to work on something else while in the middle of a game (perhaps, even the "game of the century"), you will be unable to come back to the game. A small point, but definitely inconvenient. Another oversight, is that the WFW dictionary (which is used for both selecting words and challenging them) is not self-educating nor is it modifiable at all. This leads to words being challenged over and over, even if the computer has previously challenged it. Since the WFW dictionary is extensive, this is a rare occurrence - but a definite hindrance to the computer's game (remember, the penalty for challenging incorrectly is the loss of a turn). The word "OE", meaning a whirlwind off of the Faeroe islands, is an example of such a challengeable word. Consider it your "ace-in-the-hole" for a rainy day, when you might be losing to the computer opposition. A by-product of this non-educating dictionary, is that the computer will not use this "new" word when it selects its own words nor when it assists you. Well, perhaps these two quirks will not be overlooked in future releases of this program (if any).

All in all, this an excellent software package for those players who enjoy word games, and have difficulty finding others to join them. I highly recommend this program, as it makes full use of the Atari 520ST features and is indeed fun to play, day after day. An excellent value, and a must for your software library.

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(list prices are found in brackets, sale prices are first number)

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520ST Keyboard	$340(400)
520ST Keyboard(1 MEG)	$500(600)
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1/2 MEG Drive	$120(199)
Monochrome Monitor	$150(200)
Avatek 1200 Modem	$81(199)
Blank Discs - 3.5"	
BASF /10 Box SS DD	16(29)
Maxell /10 Box DS DD	25(39)
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Null Program	7.1	5.5	—

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WAACE XL/XE DISK LIBRARY

Order disks from the NOVATARI Disk Librarian. Price for WAACE members (i.e. anyone who subscribes to Current Notes) is $3.00/disk plus $1.00 for postage and handling for every three disks. If you are not a member of WAACE, cost is a flat $5.00/disk (includes postage and handling). Send checks, payable to NOVATARI, to M. Evan Brooks, 4008 Patricia Street, Annandale, VA 22003.

GAME DISKS

1 - Text Adventures (Crash Dive!, Adventure in the 5th Dimension, Kidnapped, Operation Sabotage)
2 - Gambling (Black Jack, Five Card Stud, Gambler's Dozen, Progressive Jackpot, Poker Squares)
3 - Simulations (Broadway, Civil War, Dairy Farming, Dark Horse, Kingdom)
4 - Mazes (Dragon Maze, Hidden Maze, Caves of Ice, The Halls of the Leprechaun King, Maze Maniac, Master Maze)
5 - Parlor Games (Othello, Battleship, Monopoly, Mille Bornes, Yhatzee, Simon, Solitaire)
6 - Graphics (Engineer, Night Flyer, Oil Plazza Hotel, Retrofire, Titan)
7 - ACTION! Games (Rats Revenge, Warp Attack, Birds, Angle Worms, GEM, Snails, Pong, Break Out, Bounce Fun)
8 - Arcade Look-A-Likes (Pac Attack, Livewire, Maniac, Burgers & more ...)
9 - Text Adventures 2 (Dr. Livingston, Titanic, Treasure Island, and Werewolf)
10 - Text Adventures 3 (High School Confidential, Mad House, Death World)
11 - SURF'S UP! (Copyrighted Public Domain boot disk with some Beach Boys Music)
12 - SKI KING with ski slope editor. Ski down ready made slopes or build your own - a super arcade game!

TELECOMMUNICATIONS DISKS

1 - 850 Interface (AMODEM Plus v4.4, AMODEM Plus XL v2.5, AUTODIAL, TSCOPE, plus several documentation files)
2 - 835/1030 Modem (AMODEM - 3 versions, TSCOPE, DISKLINK, handlers and documentation for all programs)
3 - MPP Modem (AMODEM Plus v1.6, AMODEM XL, MPP File converters, R-Handler, MSCOPE and documentation)
4A - AMODEM 7.2 (Works with all popular modems, many bells and whistles, handlers and complete docs included)

EDUCATION DISKS

1 - Mathematics (Drill, Function, Line, Math Kids, Math Fractions, Math Quiz, Math Time, Multiply)
2 - Primary Grades - english, reading

MUSIC DISKS

1 - TV/Movie Themes (AMS I - Cheers, The Entertainer, Ewok Celebration, Knight Rider, Raiders of the Lost Ark)
2 - Rock (AMS I - Beat-It, Eye of the Tiger, Thriller, Still Rock'n Roll to Me & more...)
3 - Jazz (AMS II - In The Mood, Satin Doll, Take 5, Muskrat Rag, Soda Rag, City Lights, Atrain, Southern Nights, Ghostbusters, We Are The World)
4 - BASIC Music Programs (Star Spangled Banner, Flight of the Bumble Bee, The Entertainer, Darktow Strutter's Ball, Handel's Messiah, Mr. Sandman, Bibbidi Bobbidi Do)

LANGUAGE DISKS

1 - fig-FORTH version 1.1 (includes FORTH language, assembler, debugger, editor and complete documentation files)
2 - ACTION source code for Rats Revenge, Warp Attack, Angle Worms, GEM, Snails, Pong) - GAME DISK #7
3 - ACTION! Graphic Demos (14 Graphic Demos, 13 of them in source code, FADE.COM is without source code)
4 - ACTION! Utility Programs (8 files to aid the ACTION! programmer, most from Clinton Parker's BBS)
5 - ACTION! Modules #1 (Assortment of approximately 30 general purpose modules that you can include in your programs)
6 - ACTION! Modules #2 (Similar to Modules #1, includes PICPASTE a cut & paste graphics program)
7 - BASIC XL REF-BASE (A minature database manager built with BASIC XL.)
8 - ACTION! Disk #5 (includes the source code for FADE ,"Star Wars" text, FORK.ACT to allow simulated concurrent processing, CHAIN.ACT to chain ACTION! programs and PSPIC3.ACT the Print Shop utility.)
9 - ACTION! Disk #6 TELECOM (The ACTION! source code for the KERMIT terminal program by John Palevich, TERM.ACT a bare bones terminal program by Clinton Parker and SAMTERM.ACT)

UTILITY DISKS

1 - Misc. Utilities (Cassette to Disk, Sector Examiner, Make AUTORUN.SYS and more...)
2 - Printer (Banner Generator, Cross-Reference Lister, Disk Directory Printer, ATASCII Lister Program, Mailing List Program, Screen Dump and more...)
3 - DOS 2.5 (DOS.SYS, DUP.SYS, RAMDISK.COM, COPY32.COM, DISKFIX.COM, SETUP.COM, DOS25.DOC)
4 - Relational Data Base Management System (Provides the BASIC routines you need to build your own database aplication)
5 - Graphics Trilogy by Tim Kilby (AMUCE, char editor; BIP, graphic drawing prog; MMPC, build Display List mods)
6 - COPYMATE 130 (Sector copier for 130XE. Copies an entire disk in 1 pass, multiple copies without rereading the orig)
7 - Sector Copier (Sector copying program for the 400/800/800XL series)
8 - Translator Disk (Sometimes required to run programs written for the good old 400's and 800's)
9 - 256k RAM Upgrade for 800XL (Contains all the files and documentation to upgrade an 800XL to XE compatible 256k)
10 - Membership Disk for members of NOVATARI
11 - Mach DOS 2.1XL is a very good DOS that is Atari DOS 2.0 compatible
12 - DOS 2.6 is Atari DOS 2.0 with a modified DUP.SYS that gives one several more functions.

DEMO DISKS

1 - BALLSONG 1 & 2, BOINK, Walking Robot & Spaceship CES demos and more...).
2 - IPS Moviemaker "Clips" (Antic PD "Mini-Film Festival" with a replacement for "Happy New Year")
3 - Heavy Metal Art as collected by JACE of Jacksonville, Florida
4 - Picture Disk -- a double sided disk with a printer dump program

ANALOG DISKS

[Except for some disks in their first year, we have virtually the complete ANALOG collection. Specify the volume number or the month and year when ordering.]

W. A. A. C. E.

Washington Area Atari Computer Enthusiasts

Membership: Unless otherwise indicated, club dues are $15 per year per family. Club memberships include a subscription to this newsletter. Contact the individual clubs for more info on joining.

Club Officers: remember, any changes to this information should be submitted to the editor by the 12th of each month.

New Clubs: If you would like your club to be included in the CURRENT NOTES family, contact Joe Waters, 122 N. Johnson Rd., Sterling, VA 22170 (703) 450-4761.

Note: Please DO NOT CALL club officers after 10:00 pm.

A. U. R. A.

Atari Users Regional Association

President	John Barnes	301-652-0667
Vice President	Bill Schadt	301-622-1547
Treasurer	Richard Stoll	301-946-8435
Corr. Secretary	Marshall Abram	301-588-1005
Membership Chrm.	William Pimble	301-341-9572
Disk Librarian	Rick Kellogg	301-277-7536
Hardware Coord.	Moe Sherman	301-593-1076
CN Liason	VACANT	

MEETINGS are usually held on the 1st Thursday of every month, 7:00 pm (Library Activities), 7:30-9:00 pm (Program) in the Temple Israel Social Hall. Temple Israel is located in Silver Spring, at 420 E. University Blvd, between Colesville Rd (Route 29) and Piney Branch Rd (Route 320).

PRESIDENT'S REPORT, by John Barnes

ATARIFEST '86 was an event that AURA could walk away from with its head high. A dedicated team of workers sweated through one of the hottest days of the year to put together a "happening" that attracted more than 500 members of the public and 15 vendors (including user groups). I feel that the dividends from our efforts were very worthwhile and I expect that future AURA officers will take heart from the response to this attempt at reaching out.

Special Recognition -- The support from the entire AURA membership was very good, but there were a number of people whose contributions were indispensable. Bill Schadt did an outstanding job of closing up cracks by riding herd on the library team, making sure there were enough power strips, getting table cloths, and numerous other finishing touches. The library team of Rick Kellogg, Monty Haley, and Jeff Kellogg made certain that there was plenty of software available and that the public's questions were answered. Tom Jarrell put his graphic talents to work on posters and the program cover. Tom was everywhere on Fest day, filling in gaps that needed a person. Jim Roulhack did an outstanding job of masterminding the assembly of door prizes and then selecting winners from the part of the audience that had not already left. Linc Hallen shepherded a large-scale redistribution of software and hardware at the Flea Market. Rochelle Follender stood in the sun for hours diverting those members of the public who had mistaken a nunnery for the exhibit site. Richard Stoll must have felt like Horatius at the bridge as he faced the never ending line of people assaulting the registration table.

Vendor support -- Atari Corporation supplied a station wagon load of tee shirts, backpacks, posters, and other advertising material that was extremely helpful in lending a festive air to the proceedings. Certain vendors, like Guzick Enterprizes and Cal Com, were very generous with door prizes even though they did not exhibit. I saw people walking out with armloads of disc drives, printers, etc,, so that some vendors must have done a good business. The continued support of old friends with new software products is also deeply appreciated.

User Group support -- We thank FACE, NOVATARI, and Joe Waters for taking the time to contribute to this event. Please be assured that AURA will reciprocate in kind when the opportunity arises. The BACE group brought some new faces and we look forward to hearing more from the Baltimore area. I would also expect to see more activity in Annapolis soon.

Lessons Learned -- I would have felt better if the Atarifest had been less "commercial". On the other hand, the quickest and simplest way to serve the public is often to sell them something. I would like to see more structured demonstrations and workshops at future Atarifests. These would showcase the creativity of our own people and the power of both the eight-bit and 16-bit Ataris. Such efforts naturally require more staff and more planning, but it is evident that public interest in Atari remains high.

My failure to provide a public address system and to follow up on offers to serve refreshments detracted from the event. The importance of these items should not be underestimated next time. It might be fun to use a computer to deal with registration and the door prize drawings.

ATARIFEST PROCEEDS TO BE DONATED -- The officers of AURA long ago decided that monies derived from registration fees, the sale of tee shirts and backpacks, and the sale of display space that are in excess of the expenses of ATARIFEST '86 be distributed to a suitable worthy cause. Richard Stoll informs me that these monies will amount to between $600 and $700.

Requests for Proposal -- We have already received at least one proposal for spending this money. In the interest of fairness we wish to give other organizations an opportunity to submit proposals. The deadline for submissions is 20 July and we expect to make our award around 1 August in order to permit training by the start of the school year. We are restricting awards to organizations in Montgomery and Prince George's counties in Maryland in the interest of effective implementation and support by AURA.

Proposals should list: (1) equipment that is needed, (2) software that is needed, (3) the uses to which the material will be put, (4) the scope of the program that will use the equipment, and (5) other resources that will be used to augment the donation. AURA will work with proposers to define these items during the selection process.

Additional donations -- Additional donations of used but still usable hardware and software would greatly stretch the value of the rather meager profits from the ATARIFEST. We expect to choose a recipient that is eligible for tax benefitted donations. Please contact me if you wish to help in this way.

Evaluation of proposals -- The AURA executive committee will make its award based on its evaluation of the potential effectiveness and suitability of the proposals.

The basis for the winning award will be published in CURRENT NOTES.

<u>MONTHLY EXCHANGE</u> -- Interest in AURA's monthly Exchange is good and we hope that more people will avail themselves of this opportunity to recycle used (but not abused) hardware and software (pirated material not eligible). Contact Lincoln Hallen for details.

<u>CURRENT NOTES LIAISON</u> -- Rochelle Folinder is going back to school to pursue studies in library science. We need a replacement for Rochelle to act as a liaison to CURRENT NOTES. This activity includes handling of store sales, advertising, and billings to AURA. Please contact me if you would like to try this.

C. P. M.
Capital Pro Micro-Users

President........	Bob Kelly.......	301-839-6397
VP-Finances......	Frank Jones......	301-593-1056
VP-Communication.	Mike Abramowitz..	301-983-2363
VP-Prog.Affairs..	Joe Catterino....	301-757-1329
Disk Library.....	Joe Barbano......	301-464-0757
Sysop/RBBS.......	Frank Huband.....	703-276-8342

<u>CPM Meetings</u>: Capital Pro Micro-Users meetings are held on the <u>fourth Tuesday</u> of each month at the Public Library in Oxon Hill, Maryland. The Library is located near the Woodrow Wilson Bridge just off the Washington beltway. From Virginia via the Woodrow Wilson Bridge, stay on the beltway to Maryland exit #4 West (St. Barnabas Road). St. Barnabas Road merges with Oxon Hill Rd. (right turn at end of exit ramp); proceed 1/4 mile and Library will be on your left. The meetings are held each month in the MEETING ROOM starting at 6:30.

Program for the July meeting will be DAC-EASY accounting, a full-featured accounting program running under MS-DOS on the co-power with a retail price of only $70. We are hoping to use it to handle our club accounts.

F. A. C. E.
Frederick Atari Computer Enthusiasts

President........	Mike Kerwin......	301-845-4477
Vice President...	Roger Eastep.....	301-972-7179
Treasurer........	Buddy Smallwood..	301-432-6863
Librarian........	Chris Bigelow....	301-662-4691
Secretary........	John Maschmeier..	301-271-2470
SYSOP............	Sam Yu..........	301-662-5586
Bulletin Board....................		301-569-8305

<u>Meetings</u> are held on the <u>fourth Tuesday</u> of each month from 7:00 pm to 9:30 pm in <u>Walkersville High School</u>, MD Route 194, one mile north of MD Route 26 (Liberty Road).

<u>Membership Dues</u> are $20/year per family and include a subscription to CURRENT NOTES. Join at the meeting or send your check, payable to FACE, to Buddy Smallwood, PO Box 300, Keedysville, MD 21756.

SECRETARY'S REPORT, by John Maschmeier

At the May meeting our users group enjoyed a demonstration of "Typesetter" by Tom Jarrell. His presentation was excellent.

Our group also enjoyed the ATARIFEST very much. Several of our members found good buys at the flea markets, and some also found some good buyers for their own fleamarkets. We hope that it does become a semi-annual event. We apologize for not being able to get "COMPUTEREYES" up and running. This was our first attempt at merchandising, and we learned a lot. We expect to do much better at the next 'FEST.

For our July meeting, to be held July 22nd, we will have a demonstration of several ST programs by Buddy Smallwood, and Chris Bigelow will demonstrate GYRUSS.

We really enjoy our new meeting room at Walkersville High School. Lecture room B is equipped with two wall-mounted 25-inch color TV sets, and now everyone is able to see and enjoy the presentations.

N. C. A. U. G.
National Capital Atari Users' Group

President........	Peter Kilcullen..	202-296-5700
Vice President...	Mike Pollak......	703-768-7669
Treasurer........	Allen H. Lerman..	703-460-0289
XL/XE Librarian..	Mike Pollak......	703-768-7669
ST Librarian.....	VACANT	

<u>Meetings</u> are held on the <u>third Tuesday</u> of each month from 5:30 pm to 8:30 pm in room 543 at the National Science Foundation offices, 1800 G Street, NW, Washington, DC. Closest subway stop is Farragut West on the Blue and Orange lines. Building, on corner of 18th & G, identified by sign for Madison National Bank on the corner. Front entrance is on west side of 18th between F and G.

<u>New members</u> may join at the meeting or send $15 check, payable to NCAUG, to Allen Lerman, 14905 Waterway Drive, Rockville, MD 20853.

PRESIDENT'S REPORT, by Peter Kilcullen

N.C.A.U.G. had its June meeting on Tuesday, June 17. The attendance was quite good and several new members joined the club. The hot item of interest was the new 1040 ST with color monitor which the club purchased. Five disks of public domain programs (donated by Bill Price) were demonstrated. The club will have several new disks for the ST series by the next meeting in July. ST disks can be purchased for $4 -- a reasonable price for 30-40 programs per disk! A lively discussion on ST topics also followed. Several club members are already emerging as "ST experts" -- so come and learn about this great new computer from ATARI.

The club also continues to demonstrate and support the XE/XL series of computers. We planned to demonsrate STARFLEET I by Cygnus Software which is very highly rated by the readers of Computer Gaming World. It is a multiple featured clone of Startrek with good graphics and sound. However the disk drive cable broke and we couldn't run the program. NEXT TIME we can continue to show the BEST and LATEST in XE/XL software.

We also had a used software/hardware swap and sale. Goodies like MPP modems were going for $25 including docs and disks of software. The latest in games was available for a fraction of the cost of buying a game in the store. The software/hardware swap/sale is a regular feature of the club meetings; and you are encouraged to bring your goodies and participate. Also a regular feature of the meetings is the doorprize -- two per meeting. We give away one commercial program and one club disk at every meeting. Here's your opportunity to get a valuble program just for showing up!

Club officers for the coming year were also elected. Pete Kilcullen is the President until June 1987; Mike Pollak is Vice-President; and Al Lerman is Treasurer. Mike is continuing as the 8-bit disk librarian for the moment. Need a disk librarian for the ST programs. We will continue to meet at Room 543 at the National Science Foundation for the coming year. NEXT MEETING is JULY 15. See you there! NOTE: There is NO meeting in August.

NOVATARI
Northern Virginia Atari Users Group

President........	Ed Seward......	(703) 960-6360
Vice President...	Bob Zimmon.....	(703) 476-5924
Treasurer........	Curt Sandler...	(703) 734-9533
Secretary........	G. Weatherhead.	(703) 938-4829
Program Chairman.	Dave Meyer.....	(703) 455-7145
Public Domain Ed.	Dave Meyer.....	(703) 455-7145
Disk Librarian...	M. Evan Brooks.	(703) 354-4482
NOVATARI Prog. Ex	Jim Stevenson..	(703) 378-4093
Membership.......	Earl Lilley....	(703) 281-9017
Acquisitions.....	Palmer Pyle....	(703) 437-3883
SYSOP............	Ted Bell.......	(703) 455-5312
Bulletin Board...	ARMUDIC........	(703) 569-8305

Special Interest Groups

BEGINNERS SIG....	Gary Purinton..	(703) 476-8391
TELECOM SIG......	Dick Knisely...	(703) 476-0529
ST see below		

MAIN Meeting is normally held at the Washington Gas Light Building, 6801 Industrial Road, Springfield, VA (normally the 2nd Sunday of the month). Take 495 to East on Braddock (620) to South on Backlick (617). Left on Industrial Road (by a light with a Texaco station on the corner). Washington Gas Light is the second building on the right (big parking lot, go right in front door).

Big Auditorium		Small Auditorium	
5:30-6:30	BEGINNERS SIG	5:30-6:00	TELECOM SIG
6:30-7:30	Demos (Lib., games & productivity)	6:00-7:00	ST SIG - no machine
7:30-8:00	Business/Annoucements		
8:00-8:30	Open Forum		

NOVATARI Membership Dues are $15/year which includes a subscription to CURRENT NOTES and access to ARMUDIC. You may join at the main meeting, any chapter or SIG meeting, or by sending $15, payable to NOVATARI, to Earl Lilley, 821 Ninovan Road SE, Vienna, VA 22180.

NOVATARI CHAPTERS

BURKE, Oaks Community Center, 7:30 - 9:30, 3rd Sunday. Contact Ray Cwalina 250-3856.

GREENBRIAR, 4112 Majestic Lane, Greenbriar, 7:30 - 9:30, 4th Wednesday. Contact Jim Stevenson 378-4093.

MT VERNON / HYBLA VALLEY, 7:30, 1st Thursday. Contact Ron Peters 780-0963.

RESTON, Reston Library, 7:00 - 9:00, last Wednesday. This chapter needs a new volunteer to run it. If you are interested in helping, contact Bob Zimmon 476-5924.

STERLING, Sterling Park Community Center, 7:30 - 9:30, 1st Thursday. Note: July meeting will be on the 2nd Thursday: July 10th. Note also that the meeting place has been changed from the Community Center Annex to the Community Center (Library building near Safeway). For more info contact Palmer Pyle 437-3883.

VIENNA, Room 32, Vienna Elementary School, 7:30 - 9:30, 3rd Wednesday. Contact Dave Heagy 281-9226.

PRESIDENT'S REPORT, by Ed Seward

Once again we had a snafu with the main NOVATARI meeting. We found out the afternoon of the Thursday before the meeting that because of the Washington Gas & Light strike we would not be able meet in our usual place. In addition, Dr. Ed Bever ran into some problems and found out at the last minute that he would not be able to make it. Thanks to five people we were able to have a pretty good meeting anyway. They are: Georgia Weatherhead for finding us a place to meet on VERY short notice; Dave Meyer for keeping the meeting moving; Bob Zimmon for a good delaying action with open forum; Joe Waters and Evan Brooks for last minute recruitment for talk and demo respectively.

Dave Meyer has managed to line up two more guest speakers for August and September; Games Computers Play for August and Broderbund for the September meeting. During the ST SIG portion of the July meeting the head of the ST protion of the Ottowa Atari users' group will address the ST SIG and talk about his group.

Many people helping throughout the club have put together some new disks for the NOVATARI Disk Library. Those disks are as follows:

GAME DISK #12 -- Ski King with editor. Ski down the ready made slopes or build your own.

EDUCATION DISK #2 -- primary grades - english, reading.

UTILITY DISK #11 -- Mach DOS 2.1XL a very good DOS that is Atari DOS 2.0 compatible.

UTILITY DISK #12 -- DOS 2.6. This is DOS 2.0 with a modified DUP.SYS that gives one several more functions.

DEMO DISK #4 -- a double sided disk with pictures and a printer dump program.

AUGUST MEETING GUEST SPEAKER
GAMES
COMPUTERS
PLAY

NOVATARI ST SIG
VAST: VirginiA ST

President........	Joe Kuffner....	(703) 759-2507
Demo Volunteers..	Evan Wallace...	(703) 620-9144
Disk Librarian...	Ed Seward......	(703) 960-6360
WAACE ST BBS...................		(703) 569-3227

The ST SIG meets on the fourth Sunday of the month (July 27th and August 24th) in the Washington Gas and Light Building from 6:30 - 9:30.

ST SIG Report, by Joe Kuffner

Well, more help has arrived for Evan Wallace and the ST SIG Group in order to meet the growing demands of the group. We are still in desperate need of volunteers to handle various areas of club activities. New recruits include Joe Kuffner, who will coordinate the group, and Ed Seward, who will act as ST disk librarian.

The goal of the ST SIG is to establish a "bona fide" ST organization within NOVATARI to which all members may benefit from the experience and enthusiasm of other ST owners. Further, the club will be maintaining and updating the ST library to make the best quality public domain programs available to the group [NB. Clubs wishing to to exchange ST public domain disks may contact the librarian, Ed Seward, at P.O. Box 6826, Alexandria, VA 22306].

Tasks ahead for the group include the preparation of a "New ST Owners Disk" which will provide information/programs to new ST owners. This disk will be an introduction to what the group has to offer new owners, and will be distributed by the ST dealers.

Also ahead, we will make available at the meetings a "Hot List Forum" which will be a structured Q & A session organized around the ST Hot List volunteers. Below is our first cut at providing a list of "helpers" for new ST owners. To volunteer for this list call Ed Seward, 703-960-6360. We are also setting up an ST TIPS clearing house manned by Joe Kuffner 703-759-2507. If you've discovered something about the ST that isn't documented. Give Joe a call and pass it on.

ST MACHINE HELP	Alice Barney	703-938-9376
	Ken Whitesell	301-636-4756
	Barry Burke	703-830-1978
MIDI / MUSIC	Mike Lehr	703-931-9447
	answering mach	703-998-5411
LANGUAGES		
Assembly	Ken Whitesell	301-636-4756
C	Ken Whitesell	301-636-4756
Pascal	Ed Seward	703-960-6360
FORTRAN	John Antoniades	301-345-7354
MODULA-2	John Antoniades	301-345-7354
BASIC/LOGO	Alice Barney	703-938-9376
DATABASES	***** volunteers needed *****	
WORD PROCESSIONG		
First Word	Joe Kuffner	703-759-2507
COMMUNICATIONS		
Avatex 1200	Ed Seward	703-960-6360
ST-Talk	Ed Seward	703-960-6360
ST-Term	Ed Seward	703-960-6360
Flash	Ed Seward	703-960-6360
Omega	Ed Seward	703-960-6360
MI-Term	Ed Seward	703-960-6360
AnsiGraph	John Antoniades	301-345-7354
PC/InterComm	Ed Seward	703-960-6360
GAMING	***** volunteers needed	

As far as direction of the meetings, we hope to enhance the "2nd Sunday" ST SIG meeting (before the NOVATARI main meeting), to include activities normally only available at the "4th Sunday" meeting. General agenda as follows:

2nd Sunday (6:00 - 7:00)
1. ST SIG News and Updates of month
2. Speaker (when available)
3. Hot List Forum
4. Plans for 4th Sunday

4th Sunday (6:30-9:30)
1. ST SIG News and Update of month
2. Speaker/Highlight
3. Hot List Forum
4. Program Demos/Discussion
5. New Products/Tips
6. Plans for the future

Obviously, the agenda is subject to change as new ideas and interests are observed at the meetings. [Note: ST SIG Library Disks will be available at both sessions.]

We'll see y'all at the next meeting -- HAPPY COMPUTING!

NOVATARI ST SIG
E.A.S.T.: Eastern Atari ST Users

President........ John Kuehn..... (301) 460-0108
Vice President... VACANT

The E.A.S.T. ST SIG held their first meeting in May. Meetings will be held the fourth Thursday of each month (July 24th and August 28th) starting at 7:00 PM at the Twinbrook Library in Montgomery County at Viers Mill road at Twinbrook Parkway. The meeting room has it's own exit and thus meetings are not limited to library hours. As one can see from the brevity of the E.A.S.T. list there is a need for volunteers here also. Come on out to the July meeting and lend a hand!

S. M. A. U. G.
Southern Maryland Atari Users' Group

President........ Sam Schriner..... 301-843-7916
Secretary........ Dorothy Leonardi. 301-839-1363
Treasurer........ Bob Barnett...... 301-934-2617
Disk Librarian... Jim Sanner....... 301-884-5840

Meetings are held on the second Thursday of each month at 7:30 pm in the John Hanson Middle School in Waldorf, MD. Take MD Route #5, proceed about 1/2 mile East of the intersection of Route 301 and take the first left past the Kinney show store to the school.

New members may join at the meeting or send $15 check, payable to SMAUG, to Bob Barnett, P.O. Box 612, Waldorf, MD 20601.

W. A. C. U. G.
Woodbridge Atari Computer Users' Group

President........ Bill Parker...... 703-680-3041
First VP......... Cecil Alton...... 703-670-4842
VP-Education..... Bob Gaffney...... 703-590-3433
VP-Liaison....... Tim Mitchell..... 703-221-7722
Secretary........ Bill Alger....... 703-455-9565
Treasurer........ Curt Pieritz..... 703-494-3704
Librarian........ Arnie Turk....... 703-670-2547
Past President... Jack Holtzhauer.. 703-670-6475

Meetings are held on the third Tuesday of each month (EXCEPT for July 8, October 14, and November 11 -- all 2nd Tuesday) from 7:00 pm to 10:00 pm in the Community Room, Potomac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. Next meeting: July 8. Entering Woodbridge from either North or South on Route #1, proceed to the intersection of Route #1 and Opitz Blvd (adjacent to Woodbridge Lincoln-Mercury). Turn west on Opitz and take first left turn into the library's parking lot. The Community Room is located to your left immediately upon entering the main building.

Membership Fee is $10/year plus $1 monthly dues which includes a subscription to CURRENT NOTES for members in good standing. Join at the meeting or send check, payable to WACUG, to Bill Alger, 7792 Newington Woods Drive, Springfield, VA 22153.

The W.A.A.C.E. Hotlist

[The following individuals are available to answer your questions in the areas indicated. If you would like to help your fellow Atari enthusiasts by adding your name to the list, particularly for a peripheral or program not listed, contact Georgia Weatherhead 703-938-4829. Unless otherwise indicated, area codes are 703.]

DISK DRIVES

PERCOM	Jack Liedl	273-4256
	Greg Black	938-0748
	Gary Purinton	476-8391
	Cliff Trump	323-7184
1050	Ron Peters	780-0963
INDUS	Greg Black	938-0748
	Dale Radtke	569-8795
ASTRA	Dale Radtke	569-8795
	David Lankford	938-6743
TRAK	Roger Morlhand	630-9151
	Dick Caldwell	356-4248
RANA 1000	Mike Focke	620-2776

PRINTERS

ATARI 1027	Bruce Cameron	998-6525
ATARI 825	Frank Budelman	750-0079
CITIZEN 120D	Dave Meyers	455-7145
EPSON	Dick Knisely	476-0529
MANNASMAN-TALLY	Duke Wheeler	281-6653
	Gary Purinton	476-8391
	Cliff Trump	323-7185
OKIDATA 92	Roland Gabeler	620-9142
PANASONIC	Dennis McCormick	430-9552
	Terry White	560-7726
	Jim Parks	533-1754
PROWRITER	Greg Black	938-0748
	Ron Peters	780-0963
	Rick Frick	573-1382
SMITH CORONA	Richard Fichter Jr	378-7023
TPI	David Lankford	938-6743
GEMINI 10X	Jim Stevenson	378-4093
	Dick Caldwell	356-4248
STAR GEMINI SG 10	Mike Focke	620-2776

LANGUAGES

Assembly	Dale Radtke	569-8795
ACTION!	Richard Fichter Jr	378-7023
	Jim Stevenson	378-4093
	Chris Williamson	301-654-3647
ATARI BASIC	Dale Radtke	569-8795
	Don Tucker	301-229-5379
OSS BASIC XL	Dick Knisely	476-0529
	Chris Williamson	301-654-3647
C	Ken Whitesell	301-636-1978
FORTH	Clarence Connelly	437-6353
	Roger Morlhand	430-9151
LOGO	Georgia Weatherhead	938-4829
PASCAL	Chris Williamson	301-654-3647
	Allen Clarke	250-4469

TELECOMMUNICATIONS

1030	Harry Poulter	751-2738
	Cliff Trump	323-7184
PROMODEE	Joe DiBenedItto	323-0120
MPP	David Lankford	938-6743
	Dick Caldwell	356-4248
	Jim Parks	533-1754
HAYES SMART	R. Fichter Jr	378-7023
	Gary Purinton	476-8391
HAYES 2400	Chris Williamson	301-654-3647
HOMETERM	Dick Knisely	476-0329
	Scott Trump	323-7184
	David Lankford	938-6743
AMODEM	Gary Purinton	476-8391
	Mike Focke	620-2776
	Chris Williamson	301-654-3647

WORD PROCESSORS

ATARI WRITER	Gary Purinton	476-8391
	Jim Stevenson	938-6743
	Linda Winograd	860-0278
ATARI WRITER PLUS	Ron Peters	780-0963
BANK STREET WRITER	Adair McConnell	938-3525
TEXT WIZARD	Dick Knisely	476-0529
	Clarence Connelly	437-6353
LETTER PERFECT	Dean Miller	560-3533
	Norm Bolton	476-9690
	Steve Steinberg	435-2692
	Rick Reaser	644-0578

SPREAD SHEETS

VISICALC	Norm Bolton	476-9690
	Marvin Bielburg	385-8823
SYNCALC	Dick Knisely	476-0529
	Don Tucker	301-229-5379
	Bob Waterfield	301-840-0795
SYNTREND	Bob Waterfield	301-840-0795
HOME ACCOUNTANT	Joe DiBenedItto	323-0120

DATABASE

SYNFILE	Linda Winograd	860-0278
	Bob Waterfield	301-840-0795
DATA PERFECT	Gary Purinton	476-8391
	Don Tucker	301-229-5379
	Dean Miller	560-3533
FILE MANAGER 800	Linda Winograd	860-0278
	Scott Trump	323-7184

ADD ONS

POWER PADS	Dick Knisely	476-0529
KOALA PAD	Jim Stevenson Jr	378-4093
LIGHT PENCIL	James Hurd	978-3867
PADDLES	James Hurd	or
JOYSTICKS	James Hurd	692-1930

DISK OPERATING SYSTEMS

DOS 2.0	Dick Caldwell	356-4248
TOP DOS	Bud Stolker	370-2242
Sparta DOS	Mike Trubow	301-757-2954

[Volunteers needed for DOS 2.5, 3.0, SMART DOS, DOSXL, and MACH DOS.]

CHIPS

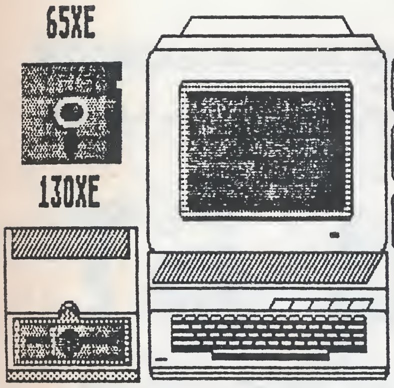
65C02	Bruce Blake	301-599-8888
ANTIC	Chris Williamson	301-654-3647

MUSIC

ATARI MUSIC COMPOSER ADVANCED MUSIC SYSTEM BANKSTREET MUSIC WRITER	Steve Steinberg	435-2962
MUSIC CONSTRUCTION SET	Steve Steinberg	435-2962
	Dick Knisely	476-0329

RAMBOARDS

256k XL	Gary Purinton	476-8391
	Jim Hurd	978-3867
	.... or	691-1930



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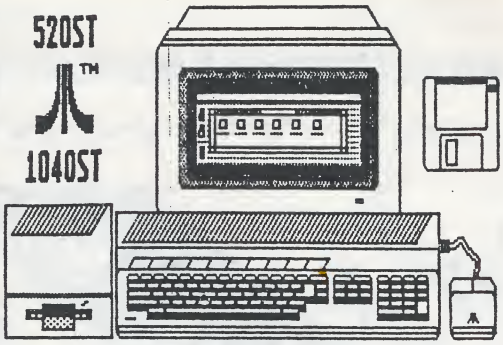

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